

KBSW180142 SDK-Windows

Windows SDKSDKMFC

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- SDK/Slamware

SDKMFC

- Windows
- SDK

SDK

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[SDK_Ref_win32.7z](#)

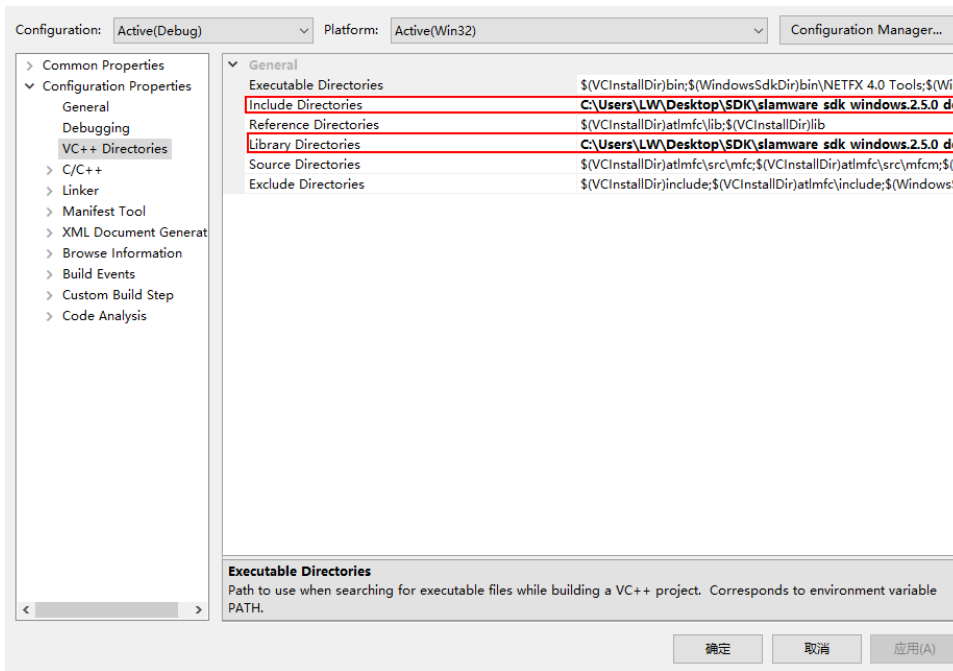
- - Visual Studio 2010 SP1
 - Slamware Windows SDK:[Slamware Windows SDK](#)
 - RoboStudio():[Robostudio installer](#)
 - Sample Code:

Visual Studio

Visual Studio 2010SP1.Net FrameworkSP1

- - Slamware SDP mini
 - Slamware SDP
 - Zeus/Apollo

Slamware SDKSlamcoreSDK

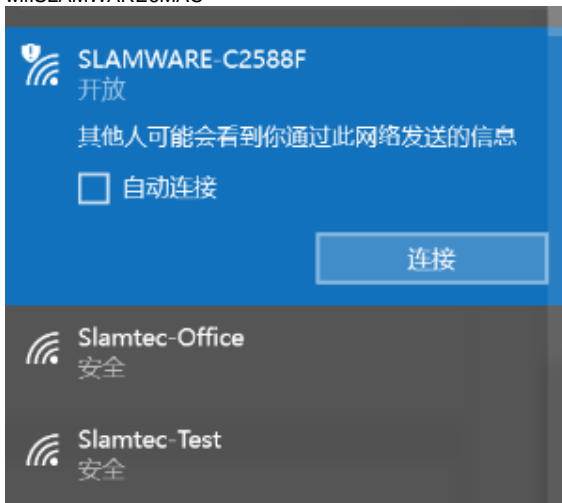


Slamware SDK\include\lib\Visual Studio

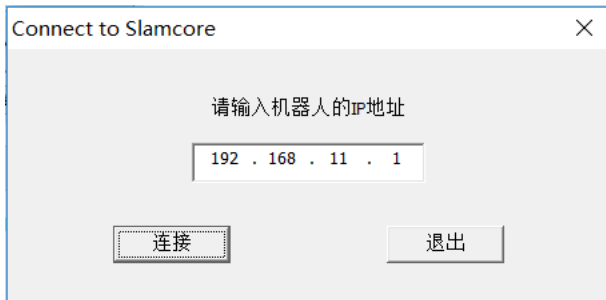
.h

warning

2. wifiSLAMWARE6MAC



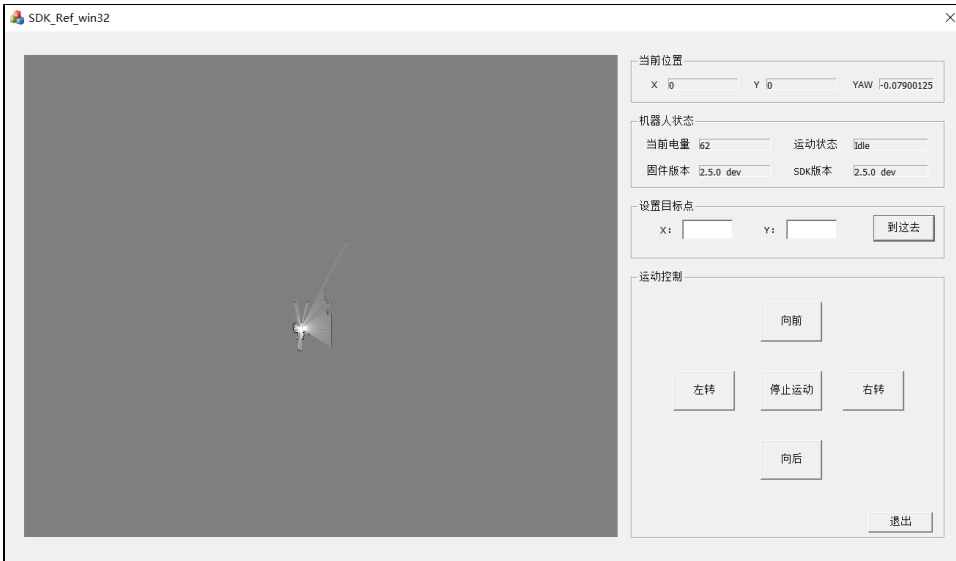
3.



wifiAPIP192.168.11.1StationPIP

IP192.168.11.1

4.



a.

[Empty white rectangular box]

[Empty light red rectangular box]

b. XYYX

c.

d.

1.

a.

moveBy""

```

void CSDK_Ref_win32Dlg::OnBnClickedBtnForward()
{
    // TODO: Add your control notification handler code here
    try{
        rpos::core::Direction direction(rpos::core::ACTION_DIRECTION::FORWARD);
        moveAction = robot.moveBy(direction);
    }catch(const ConnectionFailException &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    } catch(const RequestTimeOutException &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
    }catch(const std::exception &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
    }
}

```

b. moveTo"

```

void CSDK_Ref_win32Dlg::OnBnClickedBtnMove()
{
    // TODO: Add your control notification handler code here
    double _x = _tstof(m_dest_x);
    double _y = _tstof(m_dest_y);

    try{
        rpos::core::Location loc(_x, _y);
        moveAction = robot.moveTo(loc, false, true);
    }catch(const ConnectionFailException &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    }catch(const std::exception &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    }
}

```

2.

33100

```

BOOL CSDK_Ref_win32Dlg::OnInitDialog()
{
    CDialogEx::OnInitDialog();
    .....

    // set timer#1 with interval 100 milisecond for status update
    SetTimer(1, 100, NULL);
    // set timer#4 with interval 33 milisecond for map update
    SetTimer(4, 33, NULL);

    .....
}

```

OnTimerOnTimer

```

void CSDK_Ref_win32Dlg::OnTimer(UINT_PTR nIDEvent)
{
    if(nIDEvent == 1)

```

```

{
    // TODO: Add your message handler code here and/or call default
    UpdateData(TRUE);
    try{
        // update current pose (position + heading angle)
        rpos::core::Pose pose = robot.getPose();
        m_info_x = pose.x();
        m_info_y = pose.y();
        m_info_yaw = pose.yaw();

        // update battery status
        m_info_battery = robot.getBatteryPercentage();

        // update action status
        if(moveAction.isEmpty())
            m_info_action_status = "Idle";
        else
        {
            switch(moveAction.getStatus())
            {
                case ActionStatusWaitingForStart:
                    m_info_action_status = "Waiting For Start";
                    break;

                case ActionStatusRunning:
                    m_info_action_status = "Running";
                    break;

                case ActionStatusFinished:
                    m_info_action_status = "Finished";
                    break;

                case ActionStatusPaused:
                    m_info_action_status = "Paused";
                    break;

                case ActionStatusStopped:
                    m_info_action_status = "Stopped";
                    break;

                case ActionStatusError:
                    m_info_action_status = "Error";
                    break;

                default:
                    m_info_action_status = "Error";
                    break;
            }
        }
    }catch(const ConnectionFailException &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    }catch(const std::exception &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    }
    // update the display
    UpdateData(FALSE);
}
else
{
    // update map display
    drawMap();
}
CDialogEx::OnTimer(nIDEvent);
}

```

```

void CSDK_Ref_win32Dlg::drawMap(void)
{
    BITMAPINFO _mapDesc ;
    DWORD* pData ;
    HBITMAP hBitmap ;

    try{
        // get map from slamware
        rpos::core::RectangleF knownArea = robot.getLocationProvider().getKnownArea
(MapTypeBitmap8Bit, location_provider::EXPLORERMAP);
        location_provider::Map map = robot.getMap(MapTypeBitmap8Bit, knownArea, rpos::
features::location_provider::EXPLORERMAP);
        int mapWidth = map.getMapDimension().x();
        int mapHeight = map.getMapDimension().y();

        // initialize the bitmap header structure
        memset(&_mapDesc, 0, sizeof
(_mapDesc)); // clear BITMAPHEADER
        _mapDesc.bmiHeader.biSize = sizeof(_mapDesc);
// size of BITMAPHEADER
        _mapDesc.bmiHeader.biWidth =
mapWidth; // width by pixels
        _mapDesc.bmiHeader.biHeight =
mapHeight; // height by pixels
        _mapDesc.bmiHeader.biPlanes =
1; // 1 plane
        _mapDesc.bmiHeader.biBitCount =
32; // 24bit Color
        _mapDesc.bmiHeader.biCompression =
BI_RGB; // no compression
        _mapDesc.bmiHeader.biSizeImage = mapHeight * mapWidth; // size
by pixels

        // create DIB image to fill the map data
        hBitmap = CreatedIBSection (::GetDC(NULL), (BITMAPINFO *) &_amp;_mapDesc, DIB_RGB_COLORS,
(void**)&pData, NULL, 0);
        // fill the map data
        for (int posY = 0; posY < mapHeight; ++posY)
        {
            for (int posX = 0; posX < mapWidth; ++posX)
            {
                // get map pixel
                rpos::system::types::_u8 mapValue_8bit = map.getMapData()[posX + posY
* mapWidth] + 127;
                // fill the bitmap data
                pData[posX + posY*mapWidth] = RGB(mapValue_8bit, mapValue_8bit,
mapValue_8bit);
            }
        }
        // update bitmap map file to picture control component
        m_pic_map.SetBitmap(hBitmap);

    }catch(const ConnectionFailException &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    }catch(const std::exception &e)
    {
        MessageBox(_T(""), _T(""), MB_OK);
        CDialogEx::OnCancel();
    }
}

```

33drawMap33ms

-Slamware