

Autodesk 3ds Max® Language Pack Supplement Edition

Language packs are now being used for 3ds Max 2013 and later. For developers who need to support English only, you can build your plug-ins as you have for previous versions. However we recommend reading this article, if you are also supporting another language like Japanese, French etc... This article is for supplementing the documentation found in the 3ds Max SDK documentation topic called *Language Packs*. The 2014 topic is here as example: [3ds Max SDK: Language Packs](#). Please make sure to read that section first because it contains more details that is pre-work and post-work to this white paper. For example, it is documented there for your start-up code to include:

```
MaxSDK::Util::UseLanguagePackLocale();
```

Tools to help

Some new directories and tools are found in the 2013 and later 3ds Max SDK. The summaries of the files in the directories are as follows:

PropertySettings

The ./maxsdk/ProjectSettings has files which are used for Microsoft® Visual Studio 2010 with Service Pack 1 as 3dsmax.project.configs.props and 3dsmax.common.tools.settings.props etc. For example, the 2013 3dsmax.project.configs.props has new configurations for building Unicode. In the 2014 release the Unicode targets are the only ones available. See Figure 1 for the 2013 example.

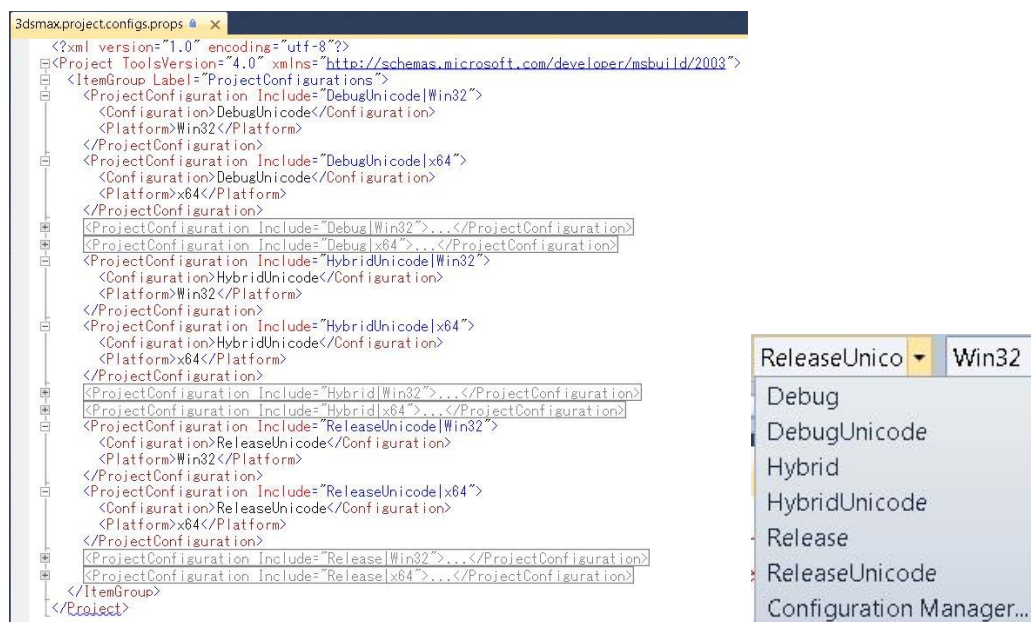


Figure1. 3dsmax.project.configs.props and build configurations

There is a definition for a Post Build Event for extracting the .mui file with the "RunMUIRct.exe". This is included in the 3dsmax.common.tools.settings.props. See Figure 2.

00001120	CD FE CD FE B0 00 00 00 00 00 01 00 00 00 00 00	へへへへへへ封封封封封封
00001130	22 00 00 00 00 00 00 00 00 00 00 00 00 8A DE 25 D6	〃封封封封封封封封封封
00001140	67 01 2A 3F C1 94 6C 6F F0 D0 DD F2 9B 10 FA 51	g・?チ麗。ン・放Q
00001150	C0 8E CA AF 25 A5 A9 F8 74 A1 80 E5 00 00 00 00	タ写ッ%・ウ。蝠封・
00001160	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	封封封封封封封封封封
00001170	00 00 00 00 88 00 00 00 0E 00 00 00 98 00 00 00	封封・封封封・封封
00001180	08 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	封封封封封封封封封封
00001190	00 00 00 00 A0 00 00 00 0C 00 00 00 00 00 00 00	封封・封封封封封封
000011A0	00 00 00 00 00 00 00 00 4D 00 55 00 49 00 00 00	封封封封M俵肘封・
000011B0	00 00 00 00 00 00 00 00 05 00 00 00 06 00 00 00	封封封封封封封封封封
000011C0	6A 00 61 00 2D 00 4A 00 50 00 00 00 00 00 00 00	j病・彌姫封封封

Figure 4. Language flag “ja-JP” in mui file.

Unfortunately these tools that work for mui file have an English language flag “en-US” only. Please refer the next section “*Localize Process*”, if you need to support language packs other than the English Language Packs.

Language Packs

There are new directories such as “en-US”, “ja-JP”, “fr-FR” etc...in the <3ds Max install> directory. You can see files for each language in these directories. See Figure 5 for Japanese examples.

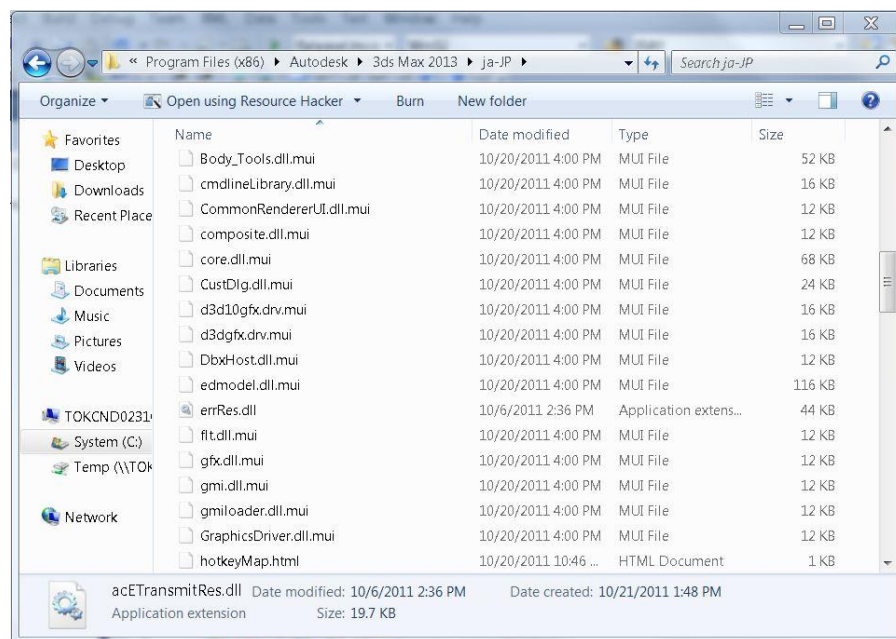


Figure 5. Explore window when “ja-JP” is opened.

Localization

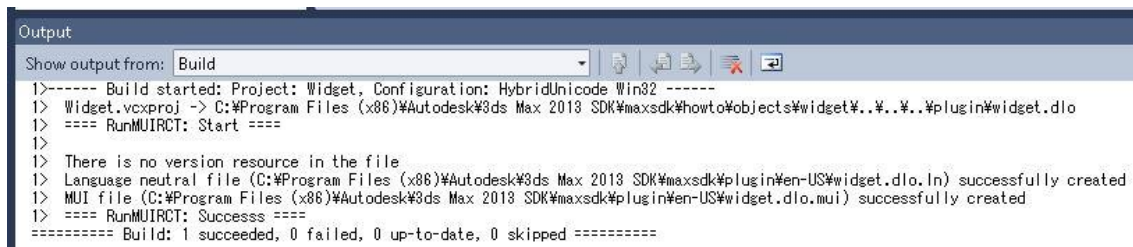
The explanation below is the process of extracting the mui file for supporting the Language Packs. We are using the English sample “Widget” project from the 3ds Max SDK.

It is recommended to confirm if your environment has the Microsoft “*muirct.exe*” file *installed first*. This is used by the SDK tool “*RunMUIRCT.exe*”. The “*muirct.exe*” tool is normally located in “C:\Program Files (x86)\Microsoft SDKs\Windows\v7.0A\Bin” which is the default location. It is also recommended to use the localization tool that Autodesk is using for the best results. This tool is: [“SDL Passolo® 2011 SP4”](#) and provides a very comprehensive set of features for localization, including a check-list, and also the ability to visually localize dialogs and other User Interface resources.

This example is using the 2013 SDK, but is similar for 2014. For example, the build targets in 2014 samples do not include the “Unicode” word in its name. Also note that this example uses the Japanese language as an example, so substitute the other language specifics as required by your localization efforts.

- 1) Open widget.vcxproj in maxsdk\howto\objects\widget using VisualStudio 2010 SP1.
- 2) Build project with ReleaseUnicode, and confirm widget.dlo in maxsdk\plugin and widget.dlo.mui in maxsdk\plugin\en-US.

(Note: Please confirm that RunMUIRCT.exe execution succeeds during the Post build Event)



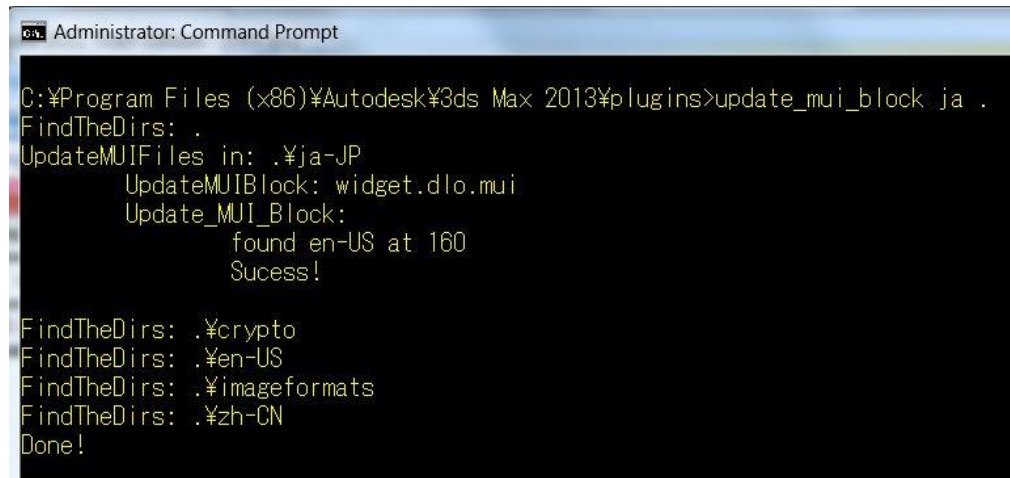
```
Output
Show output from: Build
1>----- Build started: Project: Widget, Configuration: HybridUnicode Win32 -----
1> Widget.vcxproj -> C:\Program Files (x86)\Autodesk\3ds Max 2013 SDK\maxsdk\howto\objects\widget\%.%.%.plugin\widget.dlo
1> ==== RunMUIRCT: Start ====
1>
1> There is no version resource in the file
1> Language neutral file (C:\Program Files (x86)\Autodesk\3ds Max 2013 SDK\maxsdk\plugin\en-US\widget.dlo.in) successfully created
1> MUI file (C:\Program Files (x86)\Autodesk\3ds Max 2013 SDK\maxsdk\plugin\en-US\widget.dlo.mui) successfully created
1> ==== RunMUIRCT: Success ====
1> ===== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
```

Figure 6. Output window when build is launched

- 3) Copy maxsdk\plugin\widget.dlo to <3ds max install>\plugins.
- 4) Create directories “en-US” and “ja-JP” in <3ds Max install>\plugins, if they are not already there.

(Note: Remember that you may need to create these directories during your install because they may not already be present)

- 5) Copy maxsdk\plugin\en-US\widget.dlo.mui to <3ds max install>\plugins\en-US.
- 6) Localize the widget.dlo.mui in <3ds Max install>\plugins\ja-JP. For example, use the “SDL Passolo 2011 SP4” tool for this process. (See Passolo_Demo.avi for an example of using that specific tool)
- 7) Update language flag from “en-US” to “ja_JP” in mui file using Update_MUI_Block.exe. See Figure 7.



```
Administrator: Command Prompt

C:\Program Files (x86)\Autodesk\3ds Max 2013\plugins>update_mui_block ja .
FindTheDirs: .
UpdateMUIFiles in: .¥ja-JP
    UpdateMUIBlock: widget.dlo.mui
    Update_MUI_Block:
        found en-US at 160
    Success!

FindTheDirs: .¥crypto
FindTheDirs: .¥en-US
FindTheDirs: .¥imageformats
FindTheDirs: .¥zh-CN
Done!
```

Figure 7. Command Prompt window when Update_MUI_Block.exe is launched

- 8) Launch 3ds Max with Language Pack to confirm the rollout panel dialog of the widget plugin is working properly. See Figure 8. You can start 3ds Max in a specific language by using the `-lang` flag followed by the language code. For example in Japanese it would be like: "C:\Program Files\Autodesk\3ds Max 2013\3dsmax.exe" -lang=JPN.



Figure 8. widget dialog window.