



Elektrobit

# EB GUIDE product line

Release notes

Version 6.8.0.190618155600



Elektrobit Automotive GmbH  
Am Wolfsmantel 46  
D-91058 Erlangen  
GERMANY

Phone: +49 9131 7701-0  
Fax: +49 9131 7701-6333  
<http://www.elektrobit.com>

## Legal notice

Confidential and proprietary information

ALL RIGHTS RESERVED. No part of this publication may be copied in any form, by photocopy, microfilm, retrieval system, or by any other means now known or hereafter invented without the prior written permission of Elektrobit Automotive GmbH.

All brand names, trademarks and registered trademarks are property of their rightful owners and are used only for description.

Copyright 2019, Elektrobit Automotive GmbH.

# Table of Contents

1. Migrating from 6.7.4 to 6.8 .....	6
2. New or changed in 6.8 .....	8
3. Known issues and limitations in 6.8 .....	14
4. Fixed issues in 6.8 .....	17
5. Open source components in EB GUIDE GTF and EB GUIDE Studio .....	18
5.1. ANGLE .....	18
5.2. ANTLR C# .....	19
5.3. Autodesk FBX SDK .....	20
5.4. Apache Log4net .....	58
5.5. AvalonEdit .....	64
5.6. CommonServiceLocator .....	64
5.7. DirectXMesh .....	66
5.8. dlmalloc .....	67
5.9. Extended WPF Toolkit Community Edition .....	71
5.10. FluentCommandLineParser .....	73
5.11. FreeType .....	74
5.12. HarfBuzz .....	79
5.13. ICU4C .....	81
5.14. Json.NET .....	87
5.15. LanguageExt.Core .....	87
5.16. libjpeg-turbo .....	88
5.17. libpng .....	91
5.18. Microsoft Blend for Visual Studio SDK for .NET 4.5 .....	94
5.19. MSFT ParallelExtensionsExtra .....	97
5.20. Nothings stb_easy_font .....	99
5.21. Nothings stb_image .....	100
5.22. Prism .....	101
5.23. RapidJSON .....	106
5.24. stlport on Android .....	108
5.25. System.Collections.Immutable .....	110
5.26. System.Reactive .....	114
5.27. System.Threading.Tasks.Extensions .....	115
5.28. System.ValueTuple .....	120
5.29. The Impossibly Fast C++ Delegates .....	124
5.30. TrueType font PT Sans Narrow .....	126
5.31. TrueType font PT Sans Narrow .....	127
5.32. Windows 7 API Code Pack - Shell .....	130
5.33. Windows 7 API Code Pack - Core .....	133
5.34. zlib .....	137

A. Release notes previous versions .....	139
A.1. Release notes 6.7.4 .....	139
A.1.1. Migrating from 6.7.3 to 6.7.4 .....	139
A.1.2. Fixed issues in 6.7.4 .....	139
A.2. Release notes 6.7.3 .....	140
A.2.1. Migrating from 6.7.2 to 6.7.3 .....	140
A.2.2. New or changed in 6.7.3 .....	140
A.2.3. Fixed issues in 6.7.3 .....	141
A.3. Release notes 6.7.2 .....	142
A.3.1. Migrating from 6.7.1 to 6.7.2 .....	142
A.3.2. New or changed in 6.7.2 .....	142
A.3.3. Fixed issues in 6.7.2 .....	143
A.4. Release notes 6.7.1 .....	143
A.4.1. Migrating from 6.7 to 6.7.1 .....	143
A.4.2. New or changed in 6.7.1 .....	143
A.4.3. Fixed issues in 6.7.1 .....	144
A.5. Release notes 6.7 .....	145
A.5.1. Migrating from 6.6 to 6.7 .....	145
A.5.2. New or changed in 6.7 .....	146
A.5.3. Fixed issues in 6.7 .....	148
A.6. Release notes 6.6 .....	149
A.6.1. Migrating from 6.5.1 to 6.6 .....	149
A.6.2. New or changed in 6.6 .....	149
A.6.3. Fixed issues in 6.6 .....	151
A.7. Release notes 6.5.1 .....	152
A.7.1. Migrating from 6.5 to 6.5.1 .....	152
A.7.2. Fixed issues in 6.5.1 .....	152
A.8. Release notes 6.5 .....	154
A.8.1. Migrating from 6.4 to 6.5 .....	154
A.8.2. New or changed in 6.5 .....	154
A.9. Release notes 6.4.1 .....	157
A.9.1. Migrating from 6.4 to 6.4.1 .....	157
A.9.2. New or changed in 6.4.1 .....	158
A.10. Release notes 6.4 .....	158
A.10.1. Migrating from 6.3 to 6.4 .....	158
A.10.2. New or changed in 6.4 .....	159
A.11. Release notes 6.3 .....	160
A.11.1. Migration from 6.2 to 6.3 .....	160
A.11.2. New or changed in 6.3 .....	161
A.12. Release notes 6.2 .....	162
A.12.1. Migration from 6.1 to 6.2 .....	162
A.12.2. New or changed in 6.2 .....	163




- A.13. Release notes 6.1 ..... 164
  - A.13.1. Migration from 6.0 to 6.1 and compatibility ..... 164
  - A.13.2. New or changed in 6.1 ..... 165
- A.14. Release notes 6.0 ..... 166
  - A.14.1. Migrating from 5.5.3 to 6.0 ..... 166
  - A.14.2. New or changed in 6.0 ..... 168

# 1. Migrating from 6.7.4 to 6.8

## NOTE



Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the **Problems** component. Start migration only when no errors and warnings occur anymore.

Migration is performed automatically, when opening a project that was saved with a previous version.

### ► Migration for namespaces

After migration all events and datapool items belong to the default root namespace. All state machines and templates belong to the default namespaces.

### ► Functor replaced with Delegate

Module `Functor` was removed from the EB GUIDE GTF API. It is replaced by `gtf::utils::Delegate`. For more information, see the EB GUIDE GTF user guide section "Delegates".

### ► DirectX replaced by OpenGL ES 3.0

This migration step is done automatically. If you have custom made renderers, they need to be migrated manually.

### ► Default decoding

Default decoding information is added to all profiles in this migration. Comments in the platform part of the configuration cannot be migrated automatically. Remove them for the migration. You can add them manually afterwards. The default decoding information looks as follows:

```
"gtf": {
  "resourcesystem": {
    "defaultdecoding": [
      {
        "inputformat": "gtf::decoder::ImagePath",
        "outputformat": "gtf::decoder::EncodedMemImage"
      },
      {
        "inputformat": "gtf::decoder::MeshPath",
        "outputformat": "gtf::decoder::EncodedMeshData"
      },
      {
        "inputformat": "gtf::decoder::IBLPath",
        "outputformat": "gtf::decoder::EncodedIBLData"
      },
    ],
  },
}
```

```
{
  "inputformat": "gtf::decoder::EncodedMemImage",
  "outputformat": "gtf::decoder::MemImage"
},
{
  "inputformat": "gtf::decoder::DescriptorResource::font",
  "outputformat": "gtf::decoder::FontData"
},
{
  "inputformat": "gtf::decoder::DescriptorResource::image",
  "outputformat": "gtf::decoder::ImagePath"
},
{
  "inputformat": "gtf::decoder::DescriptorResource::ibl",
  "outputformat": "gtf::decoder::IBLPath"
},
{
  "inputformat": "gtf::decoder::DescriptorResource::mesh",
  "outputformat": "gtf::decoder::MeshPath"
},
{
  "inputformat": "gtf::decoder::MemImage",
  "outputformat": "gtf::schr::decoder::NinePatchImage"
},
{
  "inputformat": "gtf::schr::decoder::NinePatchImage",
  "outputformat": "gtf::schr::decoder::DefaultMemImage"
}
],
"residentformats": [
  "gtf::decoder::FontData",
  "gtf::decoder::IBLPath",
  "gtf::decoder::ImagePath",
  "gtf::decoder::MeshPath"
]
}
```

## 2. New or changed in 6.8

This chapter lists new or changed features of EB GUIDE.

EB GUIDE Studio:

### ► Multiple models

EB GUIDE now supports multiple models. Multiple models can be run using only one EB GUIDE GTF core. Models can be started and stopped independent from each other. Inter-process communication is possible. The interface is implemented in the EB GUIDE GTF API. For the interface, see class `gtf::model::ModelService`.

### ► Namespaces

Namespaces can now be used in your EB GUIDE model. You can add events or datapool items to namespaces. To open the **Namespaces** component, in the command area click **Layout** and select **Namespaces**. For more information, see the EB GUIDE user guide section "Namespaces". For instructions, see section "Working with namespaces".

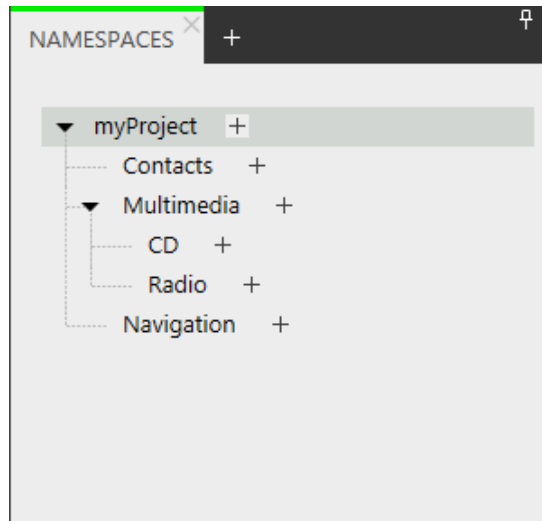



Figure 2.1. Namespaces component

### ► Multifont support

You can now combine multiple fonts into one font object. To enable this feature, for example, select a `font` property, right-click  and select **Add multifont support**. Multifont support is available for the following elements:

- Properties of type font and entries of font list
- User-defined properties of type font and entries of font list



- ▶ Datapool items of type font or entries of font list

When you are working with multiple fonts, the baseline of the default font is used as baseline of every used font. This might lead to overlaps when widget feature **Multiple lines** is enabled.

For more information, see the EB GUIDE Studio user guide section "Multifont support".

- ▶ Importing Photoshop files (.psd)

Importing Photoshop files now also supports importing labels from Photoshop files, with the properties, color, rotation, size, and font. For more information, see the EB GUIDE Studio user guide section "Photoshop file format support".

- ▶ Storage file format (.gdata)

The storage file format of the `.gdata` is improved. For more information about the storage format, see EB GUIDE Studio user guide section "Storage format".

- ▶ Jump to origin template

When you are using templates, it is now possible to go directly from a model element to its template. In the **Navigation** component right-click a model element and select **Jump to origin template**.

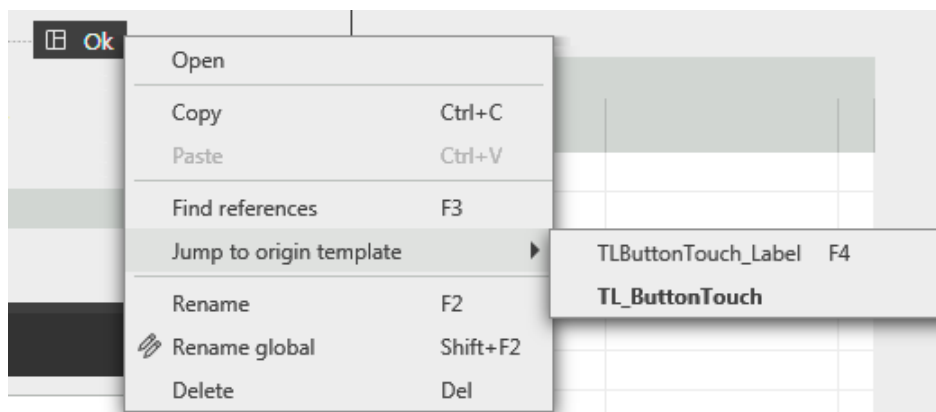


Figure 2.2. Jump to origin template

- ▶ 64-bit support

EB GUIDE Studio is now available in 64-bit.

- ▶ Model export

Exporting of EB GUIDE models is faster and therefore the simulation start is faster, as well. This especially improves the simulation of larger models.

- ▶ Selecting multiple elements

It is now possible to select multiple datapool items or events in the **Datapool** and **Events** components in EB GUIDE Studio and EB GUIDE Monitor. Use **Ctrl+A** to select all elements or hold down **Ctrl** and select elements individually.

► Master image alignment

The master image is now aligned to the top left of the view.

► Triggers

Improved the handling of triggers in the EB GUIDE Script editor. When you are in the EB GUIDE Script editor click **Add available triggers to list** and all triggers will be listed. Triggers in a script are also highlighted.



Figure 2.3. Triggers in the EB GUIDE Script editor

When you add a Trigger you can either create a new event or select an event from a namespace directly in the context menu.

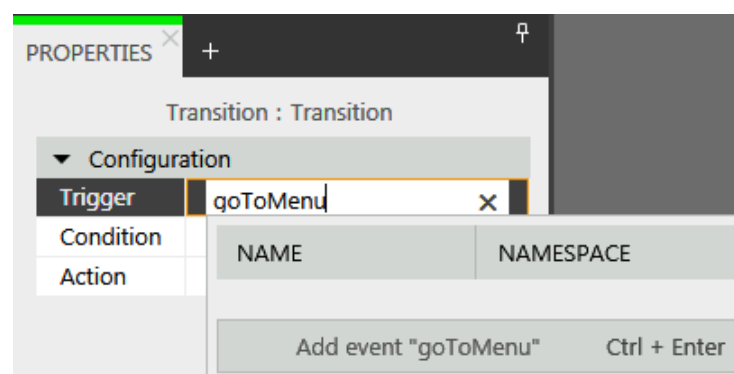


Figure 2.4. Triggers for transitions


► Improved component performance

Improved the performance of the components **Datapool**, **Properties**, and **Events**.

► Improved keyboard input

The keyboard input is improved in the components **Datapool**, **Properties**, and **Events**.

► Sortable tables

Elements in tables can now be sorted by name in the **Search results** window, **Properties** component, **Events** and **Datapool** components in EB GUIDE Studio and EB GUIDE Monitor. Click one of the following icons to change the sorting: . You can also change the arrangement of the columns in the **Datapool** and **Events** components. To do this, select the head row of a column and drag it to the position where you want to have it.

► Multiple elements in EB GUIDE Monitor




In the EB GUIDE Monitor it is now possible to add multiple events and datapool items to the watchlist.

► Warnings for namespace move

When you move a datapool item or an event to a namespace where the name already exist, a warning is prompted in a pop-up window.

► Auto-complete in EB GUIDE Script

Auto-complete functionality in the EB GUIDE Script editor is improved for triggers. EB GUIDE Script also comes with new icons:

- Keywords: 
- Functions: 
- Variables: 

## EB GUIDE GTF

► EB GUIDE GTF resource handling

EB GUIDE GTF resource handling is improved through multithreading, shared resources, and resource caching. These options are enabled in the **platform.json**. For more information, see the EB GUIDE GTF user guide section "`platform.json` configuration file".

► Font caching

The number of cached fonts can be configured in EB GUIDE GTF. For more information, see EB GUIDE GTF user guide section "`model.json` configuration file". The configuration item is `gtf.model.text-engine.fontCacheThreshold`.

► Revisited EB GUIDE GTF user guide

The EB GUIDE GTF user guide is rewritten following a new concept.

► C++ 11

EB GUIDE GTF now supports C++ version 11.

► Start-up language and start-up skin

Now you can configure the start-up language and start-up skin in EB GUIDE GTF. This is configured in the `model.json` file. For more information, see the EB GUIDE GTF user guide section "`model.json` configuration file".

► `Functor` replaced with `Delegate`

Module `Functor` was removed from the EB GUIDE GTF API. It is replaced by `gtf::utils::Delegate`. For more information, see the EB GUIDE GTF user guide section "Delegates".

► Improved lifecycle of EB GUIDE GTF interfaces

Improved lifecycle of some EB GUIDE GTF interface instances to avoid unexpected side effects during the EB GUIDE SDK usage.

► ANGLE

DirectX and Direct3D are replaced with ANGLE.

► Gamma correction

You can now adjust the gamma correction for scene graphs with the new `gamma` property. For more information, see the EB GUIDE Studio user guide section "Gamma-correct rendering".

► Texture coordinate transformation

It is now possible to arrange the textures for materials. This widget feature is available for material, PBR Phong material, and PBR GGX material. Using this widget feature it is possible to manipulate a texture as shown in the following examples:



Figure 2.5. Examples for texture coordinate transformation

► Anti-aliasing for ellipse



The ellipse is now rendered with anti-aliasing.

► libpng version 1.6.35

libpng is updated to version 1.6.35.

► Renderer API

The renderer API in namespace `gtf::schr` is improved. For more information, see the implementation examples that are provided on the EB GUIDE website in the `EB_GUIDE_Examples.zip`. For instructions, see `EB-GUIDE-Studio-Howto-Using-examples-in-EB-GUIDE-Studio.pdf`.

## 3. Known issues and limitations in 6.8

The following list contains issues and limitations known at the time of release.

<b>Summary</b>	<b>Wrong animation target links after migration from version 6.6</b>
Description	When migrating a scene graph with different transformation properties, a separate scene graph node is created for every property. After migration, animations can be linked to a target property that is in a wrong scene graph node.
Workaround	Manually change the target property so that it links to the correct scene graph node.

<b>Summary</b>	<b>Unexpected behavior of EB GUIDE GTF runtime in a multi-core environment</b>
Description	The EB GUIDE GTF runtime behaves as follows in a multi-core environment: <ul style="list-style-type: none"><li>▶ In the <b>Datapool</b> component, datapool items can have different values in different cores. Scalar datapool values are synchronized between the different cores.</li><li>▶ In the <b>Events</b> component, events from user-defined contexts are routed to all cores, for example from EB GUIDE Monitor. System events such as a default event group are sent to the connected core, for example from EB GUIDE Monitor.</li></ul>
Workaround	Not available.

<b>Summary</b>	<b>Unexpected behavior when assigning the same ID to multiple displays in <code>sceneID</code> for screenshots</b>
Description	If the same ID is assigned to multiple displays in EB GUIDE Script and screenshots are captured in EB GUIDE Monitor with <code>sceneID</code> , EB GUIDE Studio behaves unexpectedly.
Workaround	If using multiple displays in EB GUIDE GTF, assign a different ID to each display in EB GUIDE Script.

<b>Summary</b>	<b>9-patch images are not scaled correctly</b>
Description	If 9-patch images are used with alpha mask, the 9-patch image is not scaled correctly.
Workaround	Do not use alpha mask with 9-patch images.

<b>Summary</b>	<b>Functors and FunctorTasks are deprecated</b>
Description	The <code>Functors</code> and <code>FunctorTasks</code> are deprecated. In future releases these features will be removed.
Workaround	Use <code>gtf::osal::DelegateTask</code> and <code>gtf::utils::Delegate</code> instead.

<b>Summary</b>	<b>Views in focusable dynamic state machines must have the Focused widget feature</b>
Description	If a view in a dynamic state machine must be focused when it is visible, or if a view contains focusable widgets, the view must have the <b>Focused</b> widget feature.

<b>Summary</b>	<b>Views in focusable dynamic state machines must have the Focused widget feature</b>
Workaround	Add the <b>Focused</b> widget feature to the view.

<b>Summary</b>	<b>Division of integer value by zero</b>
Description	When an integer value is divided by zero, as result the maximum integer value of 2 147 483 647 is shown. When simulating the model EB GUIDE Monitor provides a log that informs about the division by zero.
Workaround	Not available.

<b>Summary</b>	<b>Image file is not displayed</b>
Description	An image file with a size bigger than 16 MB is not displayed.
Workaround	Reduce the size of the image file to less than 16 MB.

<b>Summary</b>	<b>Output to <code>stdout</code> on Windows 7 and Windows 10</b>
Description	The operating systems Windows 7 and Windows 10 do not show standard output ( <code>stdout</code> ). For example the command line parameter <code>GtfStartup.exe --version</code> does not show the version number.
Workaround	To see the output of EB GUIDE GTF and EB GUIDE GTF plugins on Windows 7 and Windows 10, redirect <code>stdout</code> and use additional tools to show the output. For example the following command line shows the version number of EB GUIDE GTF: <code>GtfStartup.exe --version   more</code> .

<b>Summary</b>	<b>EB GUIDE Monitor: <code>.dll</code> file locked by the Scripting component</b>
Description	<code>.dll</code> files that are used in the EB GUIDE Monitor <b>Scripting</b> component are locked by EB GUIDE Monitor.
Workaround	To unlock, close EB GUIDE Monitor.

<b>Summary</b>	<b>EB GUIDE Monitor shows only one instance of a dynamic state machine</b>
Description	EB GUIDE Monitor only shows one dynamic state machine in the state machine component and it shows only the last state whenever one of the dynamic state machine instance's states was changed.
Workaround	Not available

<b>Summary</b>	<b>State machine changes in GTF are not updated</b>
Description	EB GUIDE Monitor registers for state machine changes in EB GUIDE GTF only for the first communication context (core-runtime), so state machine changes in other contexts are not updated to EB GUIDE Monitor.
Workaround	Not available

<b>Summary</b>	<b>No rendering in edit mode</b>
Description	No rendering in edit mode, when GPU memory is smaller than the size of used IBL file.
Workaround	Make sure your GPU memory is big enough

<b>Summary</b>	<b>Error messages are not showing in logger</b>
Description	If a project is simulated with a newer version for the first time, error messages are not shown in logger of EB GUIDE Monitor.
Workaround	Normal function when simulation started a second time.

<b>Summary</b>	<b>Focus management does not work correctly</b>
Description	Focus management does not work correctly when you use multiple scenes and EB GUIDE Script functions <code>focusNext()</code> or <code>focusPrevious()</code> .
Workaround	<p>The workaround depends on how you use the focus management. If you use focus management in one scene only, make this scene the last one in the list of scenes for its communication context. Open the project, go to <b>Project center &gt; Configure</b>, and then <b>Profiles</b>. The <b>Scenes</b> tab contains a list of scenes. Move the scene, where you are using focus management to the last scene in the list.</p> <p>If you use focus management in multiple scenes, give every scene its own communication context. For more information, see the EB GUIDE Studio user manual, sections "Communication context" and "Establishing external communication".</p>



## 4. Fixed issues in 6.8

The following list contains fixed issues known at the time of release:

▶ Access violation for images

Fixed an access violation issue when images were switched in the IPC (inter-process communication).

▶ Reentering state

Fixed an issue where a crash occurred when a state with a running dynamic state machine was reentered.

▶ Script curve with colors

Fixed an issue where the script curve when it was applied to colors would provide the wrong value to a target property.

▶ Access violation for projects

Fixed an access violation issue when opening or creating projects.

▶ Child button behavior

Touching a child button does not affect the parent button any more.

▶ Access violation onGestureHold

Fixed an access violation when `onGestureHold` was used.

▶ Broken links

Fixed an issue where EB GUIDE Studio would stop working when a linked datapool item or linked user-defined property was removed.

▶ Improved template editor

The template editor used to have performance issues when a large number of templates was handled. No performance issues remain in the template editor.

▶ Focus issues

Fixed several issues with the **Focus** widget feature category.

▶ `lineMapping` property

Fixed an issue where EB GUIDE Studio would stop working when `lineMapping` had a link to a user-defined property that was removed.

## 5. Open source components in EB GUIDE GTF and EB GUIDE Studio

### 5.1. ANGLE

Name	Version	Comments / usage	Target device
ANGLE	2.1.0.- df73a8e5ffdb	OpenGL ES 2.0 PC emulation for Windows	

#### Copyright text

Copyright 2018 The ANGLE Project Authors.  
All rights reserved.

#### License text

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of TransGaming Inc., Google Inc., 3DLabs Inc. Ltd., nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING,

BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 5.2. ANTLR C#

Name	Version	Comments / usage	Target device
ANTLR C#	4.7	Speech grammer parsing, EB GUIDE Script parsing	

### Further information

MIT License for codepointat.js from <https://git.io/codepointat>

MIT License for fromcodepoint.js from <https://git.io/vDW1m>

### Copyright text

Copyright (c) 2012 Terence Parr and Sam Harwell

Copyright (c) 2012-2017 The ANTLR Project. All rights reserved.

Copyright Mathias Bynens <<https://mathiasbynens.be/>>

### License text

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES

OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.  
IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,  
INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT  
NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,  
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY  
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT  
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF  
THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

MIT License for codepointat.js from <https://git.io/codepointat>

MIT License for fromcodepoint.js from <https://git.io/vDW1m>

Copyright Mathias Bynens <<https://mathiasbynens.be/>>

Permission is hereby granted, free of charge, to any person obtaining  
a copy of this software and associated documentation files (the  
"Software"), to deal in the Software without restriction, including  
without limitation the rights to use, copy, modify, merge, publish,  
distribute, sublicense, and/or sell copies of the Software, and to  
permit persons to whom the Software is furnished to do so, subject to  
the following conditions:

The above copyright notice and this permission notice shall be  
included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,  
EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF  
MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND  
NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE  
LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION  
OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION  
WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.3. Autodesk FBX SDK

Name	Version	Comments / usage	Target device
Autodesk FBX SDK	2017.1	Support for the Autodesk FBX file format	



### Further information

This software contains Autodesk® FBX® code developed by Autodesk, Inc. Copyright 2016 Autodesk, Inc. All rights, reserved. Such code is provided “as is” and Autodesk, Inc. disclaims any and all warranties, whether express or implied, including without limitation the implied warranties of merchantability, fitness for a particular purpose or non-infringement of third party rights. In no event shall Autodesk, Inc. be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of such code. Third-Party Software Credits and Attributions Portions relating to Libxml2 2.7.8 Copyright (c) 1998-2003 Daniel Veillard. All Rights Reserved. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. Portions related to Alembic v. 1.5 Copyright (c) 2009-2013, Sony Pictures Imageworks, Inc. and Industrial Light & Magic, a division of Lucasfilm Entertainment Company Ltd. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. \*Neither the name of Sony Pictures Imageworks, nor Industrial Light & Magic nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

### Copyright text

© 2016 Autodesk, Inc. All rights reserved.

## License text

Autodesk  
LICENSE AND SERVICES AGREEMENT  
Autodesk® FBX® SDK 2017

READ CAREFULLY: AUTODESK LICENSES THE SOFTWARE AND OTHER LICENSED MATERIALS ONLY ON THE CONDITION THAT LICENSEE ACCEPTS ALL OF THE TERMS CONTAINED OR REFERENCED IN THIS AGREEMENT.

By selecting the "I accept" button or other button or mechanism designed to acknowledge agreement to the terms of an electronic copy of this Agreement, or by installing, downloading, accessing, or otherwise copying or using all or any portion of the Autodesk Materials, (i) you accept this Agreement on behalf of the entity for which you are authorized to act (e.g., an employer) and acknowledge that such entity is legally bound by this Agreement (and you agree to act in a manner consistent with this Agreement) or, if there is no such entity for which you are authorized to act, you accept this Agreement on behalf of yourself as an individual and acknowledge that you are legally bound by this Agreement, and (ii) you represent and warrant that you have the right, power and authority to act on behalf of and bind such entity (if any) or yourself. You may not accept this Agreement on behalf of another entity unless you are an employee or other agent of such other entity with the right, power and authority to act on behalf of such other entity.

If Licensee is unwilling to accept this Agreement, or you do not have the right, power and authority to act on behalf of and bind such entity or yourself as an individual (if there is no such entity), (a)

DO NOT SELECT THE "I ACCEPT" BUTTON OR OTHERWISE CLICK ON ANY BUTTON OR OTHER MECHANISM DESIGNED TO ACKNOWLEDGE AGREEMENT, AND DO NOT INSTALL, DOWNLOAD, ACCESS, OR OTHERWISE COPY OR USE ALL OR ANY PORTION OF THE AUTODESK MATERIALS; AND (b) WITHIN THIRTY (30) DAYS FROM THE DATE OF ACQUIRING THE AUTODESK MATERIALS, LICENSEE MAY RETURN THE AUTODESK MATERIALS (INCLUDING ANY COPIES) TO THE ENTITY FROM WHICH THEY WERE ACQUIRED FOR A REFUND OF THE APPLICABLE LICENSE FEES PAID BY THE LICENSEE.

The words "Autodesk", "Agreement" and "Licensee" and other capitalized terms used in this Agreement are defined terms. The definitions can be found in Exhibit A (if the terms are not defined in the main body of the Agreement).

### 1. License

1.1 License Grant. Subject to and conditioned on Licensee's continuous compliance with this Agreement, Autodesk grants Licensee a



nonexclusive, nonsublicensable, nontransferable, limited license to Install and Access the Licensed SDK and User Documentation, in each case solely (a) in the Territory, (b) within the scope of the License Type and Permitted Number specified in the applicable License Identification, and (c) in accordance with the other terms of this Agreement, to:

1.1.1 (a) use the SDK for development, research, internal, educational, or commercial purposes:

(i) to create a software product with the capability to read and/or write and/or translate Licensee files, which software product links to the Library ("Developed Software"); and/or

(ii) to modify the Sample Code(s) solely to create an object code version(s) ("Modified Code(s)"); and/or

(b) reproduce the Library to link to the Developed Software.

1.1.2 (a) incorporate the executable version of the Developed Software into; and/or

(b) incorporate the Modified Code(s) into; and/or

(c) link the Library, in binary code form to; software products developed by Licensee ("Licensee Product(s)") for Licensee's Internal Business Needs.

1.1.3 reproduce, distribute and sublicense free of charge or for a fee Licensee Product(s) provided that Licensee must sublicense the Software, the Developed Software, the Library, the Sample Code(s) and the Modified Code(s) "as is", without warranty of any kind.

Various License Types are described in Exhibit B. In any case where the License Identification does not specify a License Type or Permitted Number or Territory, or there is no License Identification, the License Type will, by default, be the Stand-alone (Individual) License and the Territory will be worldwide, subject to the Export Control requirements herein.

1.1.4 Licensee shall reproduce and apply any copyright or other proprietary rights notices included on or embedded in the Software, or any part thereof, to any copies of the Software or any part thereof, or to the Developed Software, in any form.

1.1.5 Licensee shall place the following statement in the copyright area of either: (i) the end-user License and/or terms of use for the Developed Software; or (ii) the 'About Box' or similar notice page of the Developed Software; and Licensee shall also include the following statement in the copyright area of either: (a) the on-line documentation regarding the Developed Software; or (b) any other document related to Developed Software that contains copyright information:



“This software contains Autodesk® FBX® code developed by Autodesk, Inc. Copyright 2016 Autodesk, Inc. All rights, reserved. Such code is provided “as is” and Autodesk, Inc. disclaims any and all warranties, whether express or implied, including without limitation the implied warranties of merchantability, fitness for a particular purpose or non-infringement of third party rights. In no event shall Autodesk, Inc. be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of such code.”

#### 1.2 Upgrades and Previous Versions.

1.2.1 Effect of Upgrades. If Autodesk or a Reseller provides Licensee with an Upgrade to other Licensed Materials previously licensed to Licensee, the Licensed Materials previously licensed to Licensee and any other Autodesk Materials relating thereto will thereafter be deemed to be a “Previous Version.” Except as set forth in Section 1.2.2 (Exception for Relationship Program Licensees), the license grant and other rights with respect to any Previous Version will terminate one hundred twenty (120) days after Installation of the Upgrade. Within such one hundred twenty (120) day period, except as set forth in Section 1.2.2 (Exception for Relationship Program Licensees), (a) Licensee must cease all use of any Previous Version and Uninstall all copies of the Previous Version, and (b) upon expiration of such period, such Previous Version will no longer constitute Licensed Materials but rather will be deemed to be Excluded Materials and Licensee will no longer have a license for any such Previous Version. At Autodesk’s request, Licensee agrees to destroy or return to Autodesk or the Reseller from which they were acquired all copies of the Previous Version. Autodesk reserves the right to require Licensee to show satisfactory proof that all copies of any Previous Version have been Uninstalled and, if so requested by Autodesk, destroyed or returned to Autodesk or the Reseller from which they were acquired.

1.2.2 Exception for Relationship Program Licensees. The termination of rights as to Previous Versions described in Section 1.2.1 (Effect of Upgrades) may not apply to Licensee if and to the extent (a) Licensee participates in a Relationship Program and the Relationship Program Terms authorize Licensee to retain such Previous Versions or (b) otherwise authorized in writing by Autodesk.





1.3 Additional Terms. The Licensed Materials (or portions thereof) may be subject to terms (e.g., terms accompanying such Licensed Materials or made available in connection with ordering, installing, downloading, accessing, using or copying such Licensed Materials) that are in addition to or different from the terms set forth in this Agreement, and Licensee agrees to comply with such terms.

1.4 Other Materials. If Autodesk provides or makes available to Licensee any additional materials associated with the Licensed Materials, including any corrections, patches, service packs, updates or upgrades to, or new versions of, the Licensed Materials (including Upgrades) or any Supplemental Materials or User Documentation for the Licensed Materials, (a) such additional materials may include or be subject to other terms in addition to or different from the terms set forth in this Agreement (including, without limitation, additional or different fees, license terms, or restrictions on use), and Licensee agrees to comply with such terms, or (b) if there are no other terms for such additional materials, they will (except as otherwise provided by Section 1.2 (Upgrades and Previous Versions)) be subject to the same terms (including, without limitation, the licenses, applicable License Type and Permitted Number, and other terms of this Agreement) as the Licensed Materials to which such additional materials apply. In no event will the foregoing result in any rights with respect to Excluded Materials.

1.5 Authorized Users. Licensee may permit the Licensed Materials to be Installed and/or Accessed only by Licensee's Personnel (except as otherwise designated in the applicable License Type), and any such Installation or Access will be subject to any other requirements imposed by this Agreement and the applicable License Type and Permitted Number. Licensee will be responsible for compliance with this Agreement by Licensee's Personnel and any other persons who may have Access to the Autodesk Materials through Licensee (whether or not such Access is authorized by Autodesk or within the scope of the applicable License Type and Permitted Number).

1.6 Third-Party Licensed Materials. The Autodesk Materials may contain or be accompanied by third-party software, data or other materials that are subject to and provided in accordance with terms that are in addition to or different from the terms set forth in this Agreement. Such terms may be included or referenced in or with such third-party software, data or other materials (e.g., in the "About box") or a web page specified by Autodesk (the URL for which may be obtained on Autodesk's website or on request to Autodesk). Licensee agrees to comply with such terms. In addition, Licensee will take



sole responsibility for obtaining and complying with any licenses that may be necessary to use third-party software, data or other materials that Licensee uses or obtains for use in conjunction with the Licensed Materials. Licensee acknowledges and agrees that Autodesk has no responsibility for, and makes no representations or warranties regarding, such third-party software, data or other materials or Licensee's use of such third-party software, data or other materials.

**1.7 Relationship Programs.** Autodesk may offer to Licensee, and (if so) Licensee may participate in one (1) or more Relationship Programs applicable to the Licensed Materials licensed to Licensee under this Agreement (and such Relationship Programs may include rights in addition to or different from those set forth in this Agreement). Any Relationship Programs are subject to Autodesk's terms therefor, which terms are set forth in the applicable Relationship Program Terms. Licensee agrees that if it requests, accepts, or makes use of any Relationship Program, Licensee will be bound by such terms, as they may be modified from time to time in accordance with the applicable Relationship Program Terms (and such terms, as so modified from time to time, are a part of and incorporated by reference into this Agreement), and Licensee agrees to comply with such terms. Licensee acknowledges that Autodesk may require a further acceptance of such terms as a condition to participation in a Relationship Program.

**1.8 Services.** Autodesk may provide, and Licensee may elect to receive or benefit from, certain Services from time to time. Any Services are subject to Autodesk's terms therefor, which terms are set forth in the applicable Services Terms. Licensee agrees that if it requests, accepts, or makes use of any Services, Licensee will be bound by such terms, as they may be modified from time to time in accordance with the applicable Services Terms (and such terms, as so modified from time to time, are a part of and incorporated by reference into this Agreement), and Licensee agrees to comply with such terms. Licensee acknowledges that Autodesk may require a further acceptance of such terms as a condition to providing Services.

**1.9 Archival Copy.** Licensee's license under Section 1.1 (License Grant) includes the right to make a single archival copy of the Licensed Materials in the Territory, provided that (a) the single-copy limitation will not apply to copies made as an incidental part of a routine backup of Licensee's entire computer system on which the Licensed Materials are Installed in accordance with this Agreement, where such backup includes the making of copies of



substantially all other software on such computer system and (b) any archival copy may be Accessed or Installed (other than on a backup storage medium from which the Licensed Materials cannot be Accessed) only when and for so long as the primary copy of the Licensed Materials is inaccessible and inoperable. Copies of the Licensed Materials that are Installed and are in excess of the Permitted Number at any time while the primary copy of the Licensed Materials is also Accessible are not "archival copies" as permitted under this Section 1.9 (Archival Copy).

1.10 Nature of Licenses. Licensee acknowledges and agrees that when Licensee acquires a license of Licensed Materials, (including through a Relationship Program or Services), Licensee's acquisition is neither contingent on the delivery of any future features or functionality nor subject to any public or other comments (oral, written or otherwise) made by Autodesk regarding future features or functionality.

#### 1.11 Feedback.

Licensee hereby grants Autodesk, under all of Licensee's intellectual property and proprietary rights, the following worldwide, exclusive, transferable, perpetual, irrevocable, royalty-free, fully paid-up rights: (1) to make, have made, use, copy, modify, and create derivative works of the Feedback as part of or in connection with any Autodesk product, technology, service, content, material, specification or documentation (including without limitation in connection with the marketing or sale thereof); (2) to publicly perform or display, import, broadcast, transmit, distribute, license, offer to sell and sell, rent, lease or lend copies of the Feedback (and derivative works thereof and improvements thereon); and (3) to sublicense to third parties the foregoing rights, including the right to sublicense to further third parties. "Feedback" shall mean all suggestions, comments, input, ideas, reports, information or know-how (whether in oral or written form) provided by Licensee to Autodesk or an Autodesk affiliate in connection with Licensee's evaluation of or use of the Licensed Materials. Feedback does not include any artwork or sample content created by Licensee using the Licensed Materials.

### 2. License Limitations; Prohibitions

#### 2.1 Limitations and Exclusions.

2.1.1 No License Granted; Unauthorized Activities. The parties acknowledge and agree that, notwithstanding anything to the contrary in this Agreement, no license is granted (whether expressly, by implication or otherwise) under this Agreement (and this Agreement expressly excludes any right) (a) to Excluded Materials, (b) to any



Autodesk Materials that Licensee did not acquire lawfully or that Licensee acquired in violation of or in a manner inconsistent with this Agreement, (c) for Installation of or Access to the Licensed Materials beyond the applicable license term (whether a fixed term or Relationship Program period or term) or outside the scope of the applicable License Type or Permitted Number, (d) for Installation of the Licensed Materials on any Computer other than a Computer owned or leased, and controlled, by Licensee, unless otherwise authorized in writing by Autodesk, (e) to distribute, rent, loan, lease, sell, sublicense, transfer or otherwise provide all or any portion of the Autodesk Materials to any person or entity except as expressly set forth in this Agreement or as expressly authorized in writing by Autodesk, (f) to provide or make available any features or functionality of the Autodesk Materials to any person or entity (other than to and for Licensee itself for the purpose specified in the applicable License Type), whether or not over a network and whether or not on a hosted basis, (g) except as otherwise expressly provided with respect to a specific License Type, to Install or Access or allow the Installation of or Access to the Autodesk Materials over the Internet or other non-local network, including, without limitation, use in connection with a wide area network (WAN), virtual private network (VPN), virtualization, Web hosting, time-sharing, service bureau, software as a service, cloud or other service or technology, (h) to remove, alter or obscure any proprietary notices, labels or marks in the Autodesk Materials, (i) to decompile, disassemble or otherwise reverse engineer the Autodesk Materials, or (j) to translate, adapt, arrange, or create derivative works based on, or otherwise modify the Autodesk Materials for any purpose.

**2.1.2 Licensed Materials as a Single Product.** The Licensed Materials are licensed to Licensee as a single product and the applicable components may not be separated for Installation or Access (and all such components must be Installed and Accessed on the same Computer except as authorized in writing by Autodesk).

**2.1.3 Territory.** Except as otherwise authorized in writing by Autodesk, the licenses granted in this Agreement are granted only for the Territory. Nothing in this Agreement permits Licensee (including, without limitation, Licensee's Personnel, if any) to Install or Access the Licensed Materials outside of the Territory.

**2.1.4 Effect of Unauthorized Use.** Licensee will not engage in, and will not permit or assist any third party to engage in any of the uses or activities prohibited (or any uses or activities inconsistent



with the limitations described) in this Section 2.1 (Limitations and Exclusions) (collectively, “Unauthorized Uses”). Any such Unauthorized Use, and any Installation of or Access to the Licensed Materials provided under this Agreement, outside of the scope of the applicable license grants (including, without limitation, outside the applicable License Type and/or Permitted Number) or otherwise not in accordance with this Agreement, constitute or result in infringement of Autodesk’s intellectual property rights as well as a breach of this Agreement. Licensee will notify Autodesk promptly of any such Unauthorized Uses or other unauthorized Installation or Access.

2.1.5 Use of Open Source Software by Licensee. If Licensee uses any third party software (including free or Open Source Software), whether or not in conjunction with the Software, Licensee shall ensure that its use does not: (i) create, or purport to create, obligations of Autodesk or any of its affiliates with respect to the Software; (ii) grant, or purport to grant, to any third party any rights to or immunities under Autodesk’s or any of its affiliates intellectual property rights; or (iii) cause the Software to be subject to any licensing terms other than those set forth in this Agreement.

## 2.2 Circumvention.

2.2.1 Licensee may not (i) utilize any equipment, device, software, or other means to (or designed to) circumvent or remove any form of technical protection used by Autodesk in connection with the Autodesk Materials, or (ii) Install or Access the Autodesk Materials with any product code, authorization code, serial number, or other copy-protection device not supplied by Autodesk directly or through a Reseller. Without limitation of the generality of the foregoing, Licensee may not utilize any equipment, device, software, or other means to (or designed to) circumvent or remove the Autodesk License Manager or any tool or technical protection measure provided or made available by Autodesk for managing, monitoring or controlling Installation of or Access to Autodesk Materials.

2.2.2 Licensee may not utilize any equipment, device, software, or other means to (or designed to) circumvent or remove any usage restrictions, or to enable functionality disabled by Autodesk, in connection with the Excluded Materials. Licensee may not bypass or delete any functionality or technical limitations of the Autodesk Materials that (or that are designed to) prevent or inhibit the unauthorized copying of, Installation or Access to the Excluded Materials.

## 3. All Rights Reserved



Autodesk and its licensors retain title to and ownership of, and all other rights with respect to, the Autodesk Materials and all copies thereof, including, without limitation, any related copyrights, trademarks, trade secrets, patents, and other intellectual property rights. Licensee has only the limited licenses granted with respect to the Licensed Materials expressly set forth in this Agreement, and Licensee has no other rights, implied or otherwise. Licensee acknowledges and agrees that the Autodesk Materials are licensed, not sold, and that rights to Install and Access the Licensed Materials are acquired only under the license from Autodesk. The structure and organization of Software included in the Autodesk Materials, any source code or similar materials relating to such Software, any API Information and Development Materials (both as described in Section 1.11 (APIs)), and any other Licensed Materials identified as confidential or proprietary are valuable trade secrets of, and confidential and proprietary information of, Autodesk and its suppliers, and (a) may not be distributed, disclosed or otherwise provided to third parties, and (b) may be used only internally and only in conjunction with and for Licensee's own authorized internal use of the Licensed Materials.

#### 4. Privacy; Use of Information; Connectivity

4.1 Privacy and Use of Information. Licensee acknowledges and agrees that Licensee (and third parties acting on Licensee's behalf) may provide, and Autodesk and its Resellers (and third parties acting on behalf of Autodesk and its Resellers) may obtain, certain information and data with respect to Licensee (including, without limitation, personal information) and Licensee's business in connection with this Agreement, including, without limitation, information and data provided to or obtained by Autodesk and its Resellers (or third parties acting on behalf of Autodesk and its Resellers) through the Customer Information Form and otherwise, in connection with ordering, registration, activation, updating, validating entitlement to, auditing, monitoring Installation of and Access to Autodesk Materials, Relationship Programs and Services and managing the relationship with Licensee. Licensee hereby consents to Autodesk maintaining, using, storing and disclosing such information and data (including, without limitation, personal information, if any) in conformity with Autodesk's policies on privacy and data protection, as such policies may be updated from time to time, including without limitation Autodesk's Privacy Statement, as currently located at <http://usa.autodesk.com/privacy/>. Without limitation of the generality of the foregoing, Licensee acknowledges and agrees that:



(a) Autodesk may from time to time prompt Licensee (and third parties acting on Licensee's behalf) to provide express agreement to the terms of Autodesk's Privacy Statement and/or express agreement to specific uses of information and data (including, without limitation, personal information); (b) Autodesk may provide information and data, including, without limitation, information and data about Licensee's use of Autodesk Materials, Relationship Programs, and Licensee's support requests, to Autodesk subsidiaries and affiliates, Resellers and other third parties in connection with the provision, maintenance, administration or usage of Licensed Materials, Relationship Programs or Services or in connection with enforcement of any agreements relating to Licensed Materials, Relationship Programs or Services; and (c) Autodesk may make cross-border transfers of such information and data, including to jurisdictions with privacy or data protection laws that are less protective of Licensee than the jurisdiction in which Licensee is domiciled. Licensee acknowledges and agrees that such policies may be changed from time to time by Autodesk and that, effective upon posting on Autodesk's website or other written notice from Autodesk, Licensee will be subject to such changes.

4.2 Connectivity. Certain Licensed Materials may facilitate or require Licensee's access to and use of content and services that are hosted on websites maintained by Autodesk or by third parties. In some cases, such content and services may appear to be a feature or function within, or extension of, the Licensed Materials on Licensee's Computer even though hosted on such websites. Accessing such content or services and use of Licensed Materials may cause Licensee's Computer, without additional notice, to connect automatically to the Internet (transitorily, intermittently or on a regular basis) and to communicate with an Autodesk or third-party website—for example, for purposes of providing Licensee with additional information, features and functionality or to validate that the Licensed Materials and/or content or services are being used as permitted under this Agreement or other applicable terms. Such connectivity to Autodesk websites is governed by Autodesk's policies on privacy and data protection described in this Section 4 (Privacy; Use of Information; Connectivity). Such connectivity to websites of third parties is governed by the terms (including the disclaimers and notices) found on such sites or otherwise associated with the third-party content or services. Autodesk does not control, endorse, or accept responsibility for any such third-party content or services, and any dealings between Licensee and any third party in





connection with such content or services, including, without limitation, such third party's privacy policies, use of personal information, delivery of and payment for goods and services, and any other terms associated with such dealings, are solely between Licensee and such third party. Autodesk may at any time, for any reason, modify or discontinue the availability of any third-party content or services. Access to and use of certain content and services (whether of Autodesk or third parties) may require assent to separate terms and/or payment of additional fees.

#### 5. Limited Warranty and Disclaimers

5.1 Limited Warranty. Autodesk warrants that, as of the date on which the Licensed Materials are delivered to Licensee and for ninety (90) days thereafter or if the license term is shorter, such shorter period ("Warranty Period"), the Licensed Materials will provide the general features and functions described in the User Documentation portion of the Licensed Materials. Autodesk's entire liability and Licensee's exclusive remedy during the Warranty Period ("Limited Warranty") will be, with the exception of any statutory warranty or remedy that cannot be excluded or limited under law, at Autodesk's option, (i) to attempt to correct or work around errors, if any, or (ii) to refund the license fees, if any, paid by Licensee and terminate this Agreement or the license specific to such Licensed Materials. Such refund is subject to the return, during the Warranty Period, of the Autodesk Materials, with a copy of Licensee's License Identification, to Licensee's local Autodesk office or the Reseller from which Licensee acquired the Autodesk Materials. THE LIMITED WARRANTY SET FORTH IN THIS SECTION GIVES LICENSEE SPECIFIC LEGAL RIGHTS. LICENSEE MAY HAVE ADDITIONAL LEGAL RIGHTS UNDER LAW WHICH VARY FROM JURISDICTION TO JURISDICTION. AUTODESK DOES NOT SEEK TO LIMIT LICENSEE'S WARRANTY RIGHTS TO ANY EXTENT NOT PERMITTED BY LAW.

5.2 Disclaimer. EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED IN SECTION 5.1 (LIMITED WARRANTY), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, AUTODESK AND ITS SUPPLIERS MAKE, AND LICENSEE RECEIVES, NO WARRANTIES, REPRESENTATIONS, OR CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT, OR WARRANTIES OTHERWISE IMPLIED BY STATUTE OR FROM A COURSE OF DEALING OR USAGE OF TRADE) WITH RESPECT TO ANY AUTODESK MATERIALS, RELATIONSHIP PROGRAMS, OR SERVICES (PURSUANT TO A RELATIONSHIP PROGRAM OR OTHERWISE). ANY STATEMENTS OR REPRESENTATIONS ABOUT THE AUTODESK MATERIALS, RELATIONSHIP PROGRAMS OR SERVICES AND THEIR FEATURES OR FUNCTIONALITY IN THE LICENSED





MATERIALS OR ANY COMMUNICATION WITH LICENSEE ARE FOR INFORMATION PURPOSES ONLY, AND DO NOT CONSTITUTE A WARRANTY, REPRESENTATION, OR CONDITION. WITHOUT LIMITING THE FOREGOING, AUTODESK DOES NOT WARRANT: (a) THAT THE OPERATION OR OUTPUT OF THE LICENSED MATERIALS OR SERVICES WILL BE UNINTERRUPTED, ERROR-FREE, SECURE, ACCURATE, RELIABLE, OR COMPLETE, WHETHER OR NOT UNDER A RELATIONSHIP PROGRAM OR SUPPORT BY AUTODESK OR ANY THIRD PARTY; (b) THAT ERRORS WILL BE CORRECTED BY AUTODESK OR ANY THIRD PARTY; OR (c) THAT AUTODESK OR ANY THIRD PARTY WILL RESOLVE ANY PARTICULAR SUPPORT REQUEST OR THAT SUCH RESOLUTION WILL MEET LICENSEE'S REQUIREMENTS OR EXPECTATIONS. NOTHING IN THE FOREGOING RESTRICTS THE EFFECT OF WARRANTIES OR CONDITIONS WHICH MAY BE IMPLIED BY LAW WHICH CANNOT BE EXCLUDED, RESTRICTED OR MODIFIED NOTWITHSTANDING A CONTRACTUAL RESTRICTION TO THE CONTRARY. WITHOUT LIMITING THE FOREGOING, AUTODESK AND ITS SUPPLIERS MAKE, AND LICENSEE RECEIVES, NO WARRANTIES THAT: (I) FUTURE VERSIONS OF THE SDK, LIBRARY AND/OR SAMPLE CODE(S), IF ANY, WILL CONTAIN FEATURES SIMILAR TO OR THE SAME AS THE SDK, LIBRARY AND/OR SAMPLE CODE(S), RESPECTIVELY OR WILL BE COMPATIBLE WITH THE SDK, LIBRARY AND/OR SAMPLE CODE(S), RESPECTIVELY; (II) THE SOFTWARE OR THE SDK, LIBRARY AND/OR SAMPLE CODE(S) WILL MEET LICENSEE REQUIREMENTS; OR (III) OPERATION OF THE SDK, LIBRARY OR SAMPLE CODE(S) WILL BE UNINTERRUPTED OR ERROR-FREE.

## 6. Warnings

**6.1 Functionality Limitations.** The Licensed Materials and Services (except for Licensed Materials designed for non-commercial use, such as Autodesk Materials designed to be used for household or other consumer purposes or licensed only for purposes of educational or individual learning) are commercial professional tools intended to be used by trained professionals only. Particularly in the case of commercial professional use, the Licensed Materials and Services are not a substitute for Licensee's professional judgment or independent testing. The Licensed Materials and Services are intended only to assist Licensee with its design, analysis, simulation, estimation, testing and/or other activities and are not a substitute for Licensee's own independent design, analysis, simulation, estimation, testing, and/or other activities, including those with respect to product stress, safety and utility. Due to the large variety of potential applications for the Licensed Materials and Services, the Licensed Materials and Services have not been tested in all situations under which they may be used. Autodesk will not be liable in any manner whatsoever for the results obtained through use of the Licensed Materials or Services. Persons using the Licensed Materials



or Services are responsible for the supervision, management, and control of the Licensed Materials and Services and the results of using the Licensed Materials and Services. This responsibility includes, without limitation, the determination of appropriate uses for the Licensed Materials and Services and the selection of the Licensed Materials, Services and other computer programs and materials to help achieve intended results. Persons using the Licensed Materials or Services are also responsible for establishing the adequacy of independent procedures for testing the reliability, accuracy, completeness, and other characteristics of any output of the Licensed Materials or Services, including, without limitation, all items designed with the assistance of the Licensed Materials or Services. Licensee further acknowledges and agrees that the Licensed Materials form part of Licensee's total unique hardware and software environment to deliver specific functionality, and that the Licensed Materials and Services provided by Autodesk may not achieve the results Licensee desires within Licensee's design, analysis, simulation, estimation, and/or testing constraints.

#### 6.2 Activation Codes and Security.

##### 6.2.1 Activation Code Required for Installation/Access and Continued

Use. Installation of and Access to the Licensed Materials require, and the continued use thereof may from time to time require, activation codes issued by Autodesk. Registration may be required before an activation code is issued by Autodesk. Licensee will provide Autodesk and its Reseller with any information required for such registration and agrees that any information provided to Autodesk or its Reseller will be accurate and current. Licensee will also maintain and update Licensee's registration information, on an ongoing basis, through customer data registration processes, including without limitation the Customer Information Form, which may be provided by Autodesk. Licensee acknowledges and agrees that Autodesk may use such information in accordance with its Privacy Statement (as described or referenced in Section 4 (Privacy; Use of Information; Connectivity)).

6.2.2 Disabling Access. LICENSEE ACKNOWLEDGES AND AGREES THAT INSTALLATION OF AND ACCESS TO LICENSED MATERIALS MAY BE DISABLED BY THE ACTIVATION, SECURITY, AND TECHNICAL PROTECTION MECHANISMS IF LICENSEE TRIES TO TRANSFER ALL OR A PART OF THE LICENSED MATERIALS TO ANOTHER COMPUTER, IF LICENSEE TAMPERS WITH THE TECHNICAL PROTECTION MECHANISMS OR DATE-SETTING MECHANISMS ON A COMPUTER OR IN THE LICENSED MATERIALS, IF LICENSEE USES THE LICENSED MATERIALS PAST AN APPLICABLE RELATIONSHIP PROGRAM PERIOD OR FIXED TERM, OR IF LICENSEE



UNDERTAKES CERTAIN OTHER ACTIONS THAT AFFECT THE SECURITY MODE OR UNDER OTHER CIRCUMSTANCES AND THAT, IN ANY SUCH EVENT, LICENSEE'S ACCESS TO LICENSEE'S WORK PRODUCT AND OTHER DATA MAY BE AFFECTED. MORE INFORMATION IS CONTAINED IN THE APPLICABLE LICENSED MATERIALS OR AVAILABLE FROM AUTODESK ON REQUEST.

6.2.3 Effect of Activation Codes. Licensee acknowledges and agrees that receipt of an activation code (whether or not provided to Licensee in error) will not constitute evidence of or affect the scope of Licensee's license rights. Those rights will be only as set forth in this Agreement and the applicable License Identification.

6.3 Affected Data. Work product and other data created with Licensed Materials made available under certain License Types, including licenses that limit the permitted purpose to educational purposes or personal learning purposes, may contain certain notices and limitations that make the work product and other data usable only in certain circumstances (e.g., only in the education field). In addition, if Licensee combines or links work product or other data created with such Licensed Materials with work product or other data otherwise created, then such other work product or data may also be affected by these notices and limitations. Autodesk will have no responsibility or liability whatsoever if Licensee combines or links work product or other data created with such Licensed Materials with work product or other data otherwise created. In addition, Licensee will not remove, alter or obscure any such notices or limitations.

## 7. Limitations of Liability

7.1 Limitation on Type and Amount of Liability. IN NO EVENT WILL AUTODESK OR ITS SUPPLIERS HAVE ANY LIABILITY (DIRECTLY OR INDIRECTLY) FOR ANY INCIDENTAL, SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES; FOR LOSS OF PROFITS, USE, REVENUE, OR DATA; OR FOR BUSINESS INTERRUPTION (REGARDLESS OF THE LEGAL THEORY FOR SEEKING SUCH DAMAGES OR OTHER LIABILITY). IN ADDITION, THE LIABILITY OF AUTODESK AND ITS SUPPLIERS ARISING OUT OF OR RELATING TO ANY AUTODESK MATERIALS, RELATIONSHIP PROGRAMS OR SERVICES WILL NOT EXCEED THE AMOUNT PAID OR PAYABLE BY LICENSEE FOR SUCH AUTODESK MATERIALS, RELATIONSHIP PROGRAMS, OR SERVICES, RESPECTIVELY.

7.2 Application of and Basis for Limitations. THE LIMITATIONS OF LIABILITY IN THIS SECTION 7 (LIMITATIONS OF LIABILITY) WILL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW TO ANY DAMAGES OR OTHER LIABILITY, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, WHETHER DERIVED FROM CONTRACT, TORT (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE) OR OTHERWISE, EVEN IF AUTODESK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LIABILITY AND REGARDLESS OF



WHETHER THE LIMITED REMEDIES AVAILABLE HEREUNDER FAIL OF THEIR ESSENTIAL PURPOSE. ALSO, LICENSEE AGREES THAT THE LICENSE, RELATIONSHIP PROGRAMS AND SERVICES FEES AND OTHER FEES CHARGED BY AUTODESK AND PAID BY LICENSEE ARE BASED ON AND REFLECTIVE OF THE ALLOCATION OF RISK CONTEMPLATED BY THIS SECTION 7 (LIMITATIONS OF LIABILITY) AND THAT THE LIABILITY LIMITATIONS IN THIS SECTION 7 (LIMITATIONS OF LIABILITY) ARE AN ESSENTIAL ELEMENT OF THE AGREEMENT BETWEEN THE PARTIES.

#### 8. Term and Termination

8.1 Term; Termination or Suspension. Each license under this Agreement, with respect to each specific set of Licensed Materials covered by this Agreement, will become effective as of the latest to occur of: (a) this Agreement becoming effective, (b) payment by Licensee of the applicable fees, excluding licenses (such as evaluation licenses) where no fees are required, (c) delivery of the specific Licensed Materials, and (d) in the case of Autodesk Materials provided in connection with a Relationship Program, upon commencement of the applicable Relationship Program period or fixed term. Each of Autodesk or Licensee may terminate this Agreement, Licensee's license as to Licensed Materials, Licensee's Relationship Program, and/or the provision of Services relating to the Licensed Materials if the other party is in breach of this Agreement and fails to cure such breach within ten (10) days after written notice of the breach; however, if Licensee is in breach of Section 1 (License) or Section 2 (License Limitations; Prohibitions), Autodesk may terminate this Agreement, Licensee's license as to Licensed Materials, Licensee's Relationship Program, and/or the provision of Services relating to the Licensed Materials immediately upon written notice of the breach. In addition, Autodesk may, as an alternative to termination, suspend Licensee's license as to the Licensed Materials, Licensee's Relationship Program, the provision of Services relating to the Licensed Materials, and/or other Autodesk obligations or Licensee rights under this Agreement (or under other terms, if any, relating to materials associated with the Licensed Materials), if Licensee fails to make a payment to Autodesk or a Reseller or otherwise fails to comply with the provisions of this Agreement or other terms relating to any such license, Relationship Program, Services, or other associated materials. Autodesk may also terminate this Agreement if Licensee becomes subject to bankruptcy proceedings, becomes insolvent, or makes an arrangement with Licensee's creditors.

This Agreement will terminate automatically without further notice or action by Autodesk if Licensee goes into liquidation.



Licensee acknowledges and agrees that Autodesk may assign or sub-contract any of its rights or obligations under this Agreement.

8.2 Effect of Termination of Agreement or License. Upon termination or expiration of this Agreement, the licenses granted hereunder will terminate. Upon termination or expiration of any license granted to Licensee, Licensee must cease all use of Autodesk Materials to which such license applies, any Relationship Program (including, without limitation, associated services), and any Services and Uninstall all copies of the Autodesk Materials. At Autodesk's request, Licensee agrees to destroy or return to Autodesk or the Reseller from which they were acquired all Autodesk Materials. Autodesk reserves the right to require Licensee to show satisfactory proof that all copies of the Autodesk Materials have been Uninstalled and, if so requested by Autodesk, destroyed or returned to Autodesk or the Reseller from which they were acquired. If Licensee's Relationship Program is terminated or expires, but this Agreement and Licensee's license to the Licensed Materials remains in effect, any rights of Licensee based on the Relationship Program (including, without limitation, rights with respect to Previous Versions) will terminate, and (unless otherwise authorized by the Relationship Program Terms) Licensee must comply with the obligations of Section 1.2.1 (Effect of Upgrades) with respect to (including the obligations to cease use of, Uninstall and destroy or return) all copies of such Previous Versions.

8.3 Survival. Sections 1.3 (Additional Terms), 1.4 (Other Materials), 1.5 (Authorized Users), 1.6 (Third-Party Licensed Materials), 1.11 (APIs), 2.1.1 (No License Granted; Unauthorized Activities), 2.1.4 (Effect of Unauthorized Use), 2.2 (Circumvention), 3 (All Rights Reserved), 4 (Privacy; Use of Information; Connectivity), 5.2 (Disclaimer), 6 (Warnings), 7 (Limitations of Liability), 8 (Term and Termination), and 9 (General Provisions) and Exhibit A will survive any termination or expiration of this Agreement.

## 9. General Provisions

9.1 Notices. Notices in connection with this Agreement by either party will be in writing and will be sent by electronic mail, postal service, or a delivery service (such as UPS, FedEx or DHL), except that Licensee may not provide notice to Autodesk of an Autodesk breach or provide notice of termination of this Agreement by electronic mail. Notices from Autodesk to Licensee will be effective (a) in the case of notices by email, one (1) day after sending to the email address provided to Autodesk, or (b) in the case of notices by mail or delivery service, five (5) days after sending by regular post



or delivery service to the address provided to Autodesk. Licensee hereby consents to service of process being effected on Licensee by registered mail sent to the address set forth on Licensee's Customer Information Form (or, if no Customer Information Form has been provided, Licensee's last address known by Autodesk) if so permitted by applicable law. Notices from Licensee to Autodesk will be effective (a) in the case of notices by email, one (1) day after sending to (and receipt by Autodesk at) CopyrightAgent@autodesk.com, or (b) in the case of notices by mail or delivery service, when received by Autodesk at Autodesk, Inc., 111 McInnis Parkway, San Rafael, California 94903, USA, Attention: Copyright Agent. If Licensee participates in a Relationship Program, either party may also provide notice as set forth in the Relationship Program Terms.

**9.2 Governing Law and Jurisdiction.** This Agreement will be governed by and construed in accordance with the laws of (a) Switzerland if Licensee acquired the Autodesk Materials in a country in Europe, Africa or the Middle East, (b) Singapore if Licensee acquired the Autodesk Materials in a country in Asia, Oceania or the Asia-Pacific region, or (c) the State of California (and, to the extent controlling, the federal laws of the United States) if Licensee acquired the Autodesk Materials in a country in the Americas (including the Caribbean) or any other country not specified in this Section 9.2 (Governing Law and Jurisdiction). The laws of such jurisdictions shall govern without reference to the conflicts-of-laws rules thereof. The UN Convention on Contracts for the International Sale of Goods and the Uniform Computer Information Transaction Act shall not apply to (and are excluded from the laws governing) this Agreement. In addition, each party agrees that any claim, action or dispute arising under or relating to this Agreement will be brought exclusively in (and the parties will be subject to the exclusive jurisdiction of) the Superior Court of the State of California, County of Marin, or the United States District Court for the Northern District of California in San Francisco, except that if Licensee has acquired the Autodesk Materials in (a) a country in Europe, Africa or the Middle East, any such claim or dispute will be brought exclusively in (and the parties will be subject to the exclusive jurisdiction of) the courts of Switzerland, or (b) a country in Asia, Oceania or the Asia-Pacific region, any such claim or dispute will be brought exclusively in (and the parties will be subject to the exclusive jurisdiction of) the courts of Singapore. Nothing in the foregoing will prevent Autodesk from bringing an action for infringement of intellectual property rights in any country where



such infringement is alleged to occur.

**9.3 No Assignment; Insolvency.** Licensee may not assign this Agreement or any rights hereunder (whether by purchase of stock or assets, merger, change of control, operation of law, or otherwise) without Autodesk's prior written consent, which may be withheld in Autodesk's sole and absolute discretion, and any unauthorized purported assignment by Licensee will be void. In the context of any bankruptcy or similar proceeding, Licensee acknowledges and agrees this Agreement is and shall be treated as an executory contract that may not be assumed and/or assigned without Autodesk's prior written consent, which consent may be withheld in Autodesk's sole and absolute discretion whether pursuant to Section 365(c)(1) of Title 11 of the United States Code or any other applicable law respecting the treatment of executory contracts within bankruptcy. Any assignment (regardless of how or on what basis the assignment may occur) will be conditioned on compliance with the following: at least thirty (30) days before assigning or agreeing to any assignment of rights under this Agreement (including transferring any copies of or right to use the Software), (a) Licensee must provide written notice to Autodesk, Uninstall all copies of the Software, and (without limitation of the generality of Section 9.7 (Audits)) allow Autodesk or its designee to inspect the records, systems and facilities of (or operated for) Licensee and its subsidiaries and affiliates to verify (by any means available to Autodesk, whether remotely or on premises) that all copies of the Software have been Uninstalled, (b) the proposed assignee must agree to comply (and Licensee must ensure that the assignee will comply) with all of the obligations of this Agreement with respect to such Software, which agreement must provide that Autodesk is a third-party beneficiary of the assignee's agreement, and the assignee must provide a copy of the agreement to Autodesk, and (c) Licensee and proposed assignee must comply with all other transfer procedures identified by Autodesk.

**9.4 Autodesk Subsidiaries and Affiliates.** Licensee acknowledges and agrees that Autodesk may arrange to have its subsidiaries and affiliates engage in activities in connection with this Agreement, including, without limitation, delivering Autodesk Materials and providing Relationship Programs and Services, provided that Autodesk (and not such subsidiaries and affiliates) will remain subject to the obligations of Autodesk under this Agreement. Licensee also agrees that Autodesk's subsidiaries and affiliates may enforce (including taking actions for breach of) this Agreement.

**9.5 Exceptions to Prohibitions; Severability.**





9.5.1 Exceptions to Prohibitions. The prohibitions contained in this Agreement will not apply where and to the extent applicable law does not allow such prohibitions to be enforced. Licensee may have other rights under the laws of the state or country within the Territory where the Licensed Materials are acquired, and this Agreement does not change Licensee's rights under the laws of such state or country if and to the extent the laws of such state or country do not permit this Agreement to do so. Licensee will bear the burden of proof to demonstrate that applicable law does not allow (i) the enforcement of such prohibitions; or (ii) this Agreement to change particular rights in a state or country (and that Licensee has not exceeded the bounds of the unenforceable prohibitions and unchangeable rights).

9.5.2 Severability. If and to the extent any provision of this Agreement is held illegal, invalid, or unenforceable in whole or in part under applicable law, such provision or such portion thereof will be ineffective as to the jurisdiction in which it is illegal, invalid, or unenforceable to the extent of its illegality, invalidity, or unenforceability and will be deemed modified to the extent necessary to conform to applicable law so as to give the maximum effect to the intent of the parties. The illegality, invalidity, or unenforceability of such provision in that jurisdiction will not in any way affect the legality, validity, or enforceability of such provision or any other provision of this Agreement in any other jurisdiction.

9.6 No Waiver. No term or provision of this Agreement will be considered waived, and no breach excused, unless such waiver is in writing signed on behalf of the party against which the waiver is asserted. No waiver (whether express or implied) will constitute consent to, waiver of, or excuse of any other, different, or subsequent breach.

9.7 Audits. Licensee agrees that Autodesk has the right to require an audit (electronic or otherwise) of the Autodesk Materials and the Installation thereof and Access thereto. As part of any such audit, Autodesk or its authorized representative will have the right, on fifteen (15) days' prior notice to Licensee, to inspect Licensee's records, systems and facilities, including machine IDs, serial numbers and related information, to verify that the use of any and all Autodesk Materials is in conformance with this Agreement. Licensee will provide full cooperation to enable any such audit. If Autodesk determines that Licensee's use is not in conformity with the Agreement, Licensee will obtain immediately and pay for valid license(s) to bring Licensee's use into compliance with this





Agreement and other applicable terms and pay the reasonable costs of the audit. In addition to such payment rights, Autodesk reserves the right to seek any other remedies available at law or in equity, whether under this Agreement or otherwise.

9.8 Language. The English language version of this Agreement is legally binding in case of any inconsistencies between the English version and any translations. If Licensee purchased the license for the Licensed Materials in Canada, Licensee agrees to the following: The parties hereto confirm that it is their wish that this Agreement, as well as other documents relating hereto, including notices, have been and shall be written in the English language only. Les parties ci-dessus confirment leur désir que cet accord ainsi que tous les documents, y compris tous avis qui s'y rattachent, soient rédigés en langue anglaise.

9.9 Construction. Ambiguities in this Agreement will not be construed against the drafter.

9.10 Force Majeure. Autodesk will not be liable for any loss, damage or penalty resulting from delays or failures in performance resulting from acts of God, supplier delay or other causes beyond Autodesk's reasonable control.

9.11 U.S. Government Rights. For U.S. Government procurements, all Autodesk Materials are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, "Rights in Commercial Computer Software or Commercial Computer Software Documentation", as applicable, and any successor regulations. Any use, modification, reproduction release, performance, display or disclosure of the Autodesk Materials by the U.S. Government shall be solely in accordance with license rights and restrictions described herein.

9.12 Export Control. Licensee acknowledges and agrees that the Autodesk Materials and Services (including any data submitted by Licensee in connection with a Service and any Licensee-specific output generated by a Service) are subject to compliance with United States and other applicable country export control and trade sanctions laws, rules and regulations, including, without limitation the regulations promulgated by the U.S. Department of Commerce and the U.S. Department of the Treasury (collectively, "Export Control Laws"). Licensee represents, warrants and covenants that neither Licensee nor Licensee's Personnel (i) are a citizen or resident of, or located within, a nation that is subject to U.S. trade sanctions or other significant trade restrictions (including, without



limitation, Cuba, Iran, Sudan, Syria and North Korea), (ii) are identified on any of the U.S. government restricted party lists (including, without limitation, the U.S. Treasury Department's List of Specially Designated Nationals and Blocked Persons, the U.S. Department of Commerce's Denied Party List, Entity List and Unverified List and the U.S. Department of State's proliferation-related lists), (iii) will, unless otherwise authorized under the Export Control Laws, use Autodesk Materials or Services in any restricted end use, including, without limitation, design, analysis, simulation, estimation, testing, or other activities related to nuclear, chemical/biological weapons, rocket systems or unmanned air vehicles applications, or (iv) will use the Autodesk Materials or Services to disclose, transfer, download, export, or re-export, directly or indirectly, any Licensee-specific output generated by the Autodesk Materials or Services, Licensee content, third party content, or any other content or material to any country, entity, or party that is ineligible to receive such items under the Export Control Laws or other laws or regulations to which Licensee may be subject. Licensee understands that the requirements and restrictions of the Export Control Laws as applicable to Licensee may vary depending on the Autodesk Materials or Services provided under this Agreement and may change over time. Licensee shall be solely responsible for (i) determining the precise controls applicable to the Autodesk Materials or Services, and (ii) complying with the Export Control Laws and monitoring any modifications to them.

9.13 Entire Agreement. This Agreement and any other terms referenced in this Agreement (such as the Relationship Program Terms and the Services Terms) constitute the entire agreement between the parties (and merge and supersede any prior or contemporaneous agreements, discussions, communications, agreements, representations, warranties, advertising or understandings) with respect to the subject matter hereof, except that particular Autodesk Materials may be subject to additional or different terms associated with such Autodesk Materials. The parties acknowledge that, in entering into this Agreement, they are not relying on any agreements, discussions, communications, agreements, representations, warranties, advertising or understandings other than as expressly set forth in this Agreement. Licensee acknowledges and agrees that Autodesk may add to or change the Relationship Program Terms and the Services Terms from time to time, provided that Autodesk will provide written notice of the additions or changes (and may allow Licensee not to renew, may permit Licensee to terminate, and may offer other options with



respect to Relationship Programs or Services) before the additions or changes are effective as to Licensee. In the event of a conflict between this Agreement and any other terms of Autodesk (including, without limitation, the Relationship Program Terms, the Services Terms, or such additional or different terms), the other terms will apply. Terms stipulated by Licensee in any communication by Licensee which purport to vary this Agreement or such other terms will be void and of no effect unless agreed in a writing signed by an authorized representative of Autodesk. Any other modifications to this Agreement will also be invalid unless agreed to in a writing signed by an authorized representative of Autodesk.

#### 10. Additional Terms.

This Section 10 (Additional Terms) applies to the following Software that may be included within the Licensed Materials: (i) Autodesk Maya; (ii) Autodesk Softimage; (iii) Autodesk 3ds Max; and (iv) Autodesk 3ds Max Design.

##### 10.1 Rendering.

10.1.1 With regard to the Rendering Software (defined below), in addition to any other license granted in this Agreement, Licensee may allow the Rendering Software to be Installed or Accessed on a Networked Basis, solely for Licensee's Internal Business Needs, specifically to render files created with the Software. However, if the Rendering Software is mental ray, and the Software is provided with a finite number of mental ray rendering nodes, then with regard to mental ray the foregoing is restricted to that number of mental ray rendering nodes.

10.1.2 With regard to the mental ray Batch Software (defined below), in addition to any other license granted in this Agreement, Licensee may allow the mental ray Batch Software to be Installed or Accessed on a Networked Basis, solely for Licensee's Internal Business Needs, and used (i) specifically to render files created with the Software; or (ii) by the Rendering Software specifically to render files created with the Software. The total number of CPUs used by the mental ray Batch Software cannot exceed the number specified in the License Identification.

10.1.3 With regard to the mental ray Standalone (defined below), Licensee may allow the mental ray Standalone to be Installed or Accessed, on a Networked Basis, solely on Computing Device(s) (defined below) solely for Licensee's Internal Business Needs specifically to render files created with the Software. With regard to mental ray Standalone, any reference in the Agreement to Computer is hereby deleted and "Computing Device(s)" substituted therefor.



10.1.4 With regard to the mental ray Satellite (defined below) for each of Autodesk 3ds Max, Autodesk Maya and Autodesk Softimage Software each mental ray Satellite executable(s) may run on one (1) or more host no more than four (4) client Computing Devices. With regard to mental ray Satellite, any reference in the Agreement to Computer is hereby deleted and “Computing Device(s)” substituted therefor.

#### 10.1.5 Definitions.

- (1) “mental ray Standalone” means the mental ray Standalone client/server executable, including the mental ray standard shader libraries and utility programs, used specifically for rendering files created with the Software.
- (2) “Rendering Software” means a subset of the Software used specifically for rendering files created with the Software.
- (3) “mental ray Batch Software” means a subset of the Software used:
  - (i) specifically for rendering files created with the Software or
  - (ii) by the Rendering Software specifically for rendering files created with the Software.
- (4) “mental ray Satellite” means the mental ray Satellite server executable, including the mental ray standard shader libraries. mental ray Satellite is functionally equivalent to the mental ray Standalone server executable, used specifically for rendering files created with the Software except it is not able to read and write files in the complete mi2 format.
- (5) “Computing Device” means (i) a single electronic assembly with a maximum of: (a) four (4) CPUs (regardless of the number of cores in each CPU) each CPU having one or more microprocessors, (b) four (4) discrete GPU-based computing boards; or (ii) a software implementation of the single electronic assembly, (a so-called ‘virtual machine’) described in (i) above, which single electronic assembly accepts information in digital or similar form and manipulates the information for a specific result based on a sequence of instructions.

#### 10.2 Exceptions.

10.2.1 This Section 10.2 (Exceptions) applies to the Autodesk Media & Entertainment 3D entertainment Software that may be included within the Licensed Materials. Notwithstanding the provisions set forth in Section 2.1.1 (No License Granted; Unauthorized Activities) if: (i) the Redistributable Component (defined below) operates with the Software and with Licensee Application; and (ii) the Redistributable Component is linked to Licensee Application; then Licensee may reproduce and distribute the Redistributable Component and Licensee



Application together, subject to Licensee's strict adherence to all of the following terms and conditions:

- (a) the class identifications for any classes of objects Licensee created shall be different from and clearly distinguishable from the class identifications used by Autodesk;
- (b) modified Sample (defined below) code and any resulting binary files in Licensee Application are identified as developed by Licensee, and not by Autodesk;
- (c) Licensee Application has Licensee's copyright notice;
- (d) any Modification (defined below), and resulting binary files, shall include the copyright notices of Autodesk, Inc. as well as the following statement: "This software contains copyrighted code owned by Autodesk, Inc. but has been modified and is not endorsed by Autodesk, Inc." The language of the copyright notice and the statement shall be in the same language as the Software language;
- (e) distribution is strictly for not-for-profit purposes;
- (f) distribution is either in binary form or text form;
- (g) distribution is subject to a standard form of click-through end-user license agreement which license agreement, among other things: (1) protects Autodesk's interests consistent with the terms of this Agreement; and (2) prohibits the redistribution of the Redistributable Component;
- (h) if the Redistributable Component operates with the Autodesk 3ds Max Software and/or Autodesk 3ds Max Design Software and with Licensee Application then prior to reproduction and distribution of the Redistributable Component and Licensee Application all MIDI files have been excluded from the Redistributable Component and Licensee Application; and
- (i) Licensee agrees to defend, indemnify and hold harmless Autodesk and its subsidiaries and affiliates from and against any and all damages, costs, losses, liabilities, expenses and settlement amounts incurred in connection with any suit, claim or action by any third party alleging that the Redistributable Component and/or Licensee Application infringes or misappropriates any patent, copyrights, moral rights, trademark, trade secret and design rights, whether registered or unregistered, and including any application for registration of any of the foregoing and all rights or forms of protections of a similar nature having equivalent or similar effect to any of these, which may subsist anywhere in the world, of such third party.

#### 10.2.2 Definitions.

- (1) "Licensee Application" means, with regard to the Software, a



Modification made by Licensee for designing, developing, and testing an application program made by Licensee.

(2) "Modification" means any: (i) addition to the substance of a Sample or any addition to the substance of the contents of a file containing a Sample; (ii) any deletion from the structure of a Sample, or any deletion from the structure of the contents of a file containing a Sample; and/or (iii) any new file that contains any part of a Sample; all of which, in Autodesk's sole discretion, ensures that the Sample is not the primary source of value.

(3) "Redistributable Component" means the Sample(s) and/or a Modification.

(4) "Sample(s)" means sample source code, or individual animations, still images, and/or audio files contained in the Software, and located in the samples directory, the examples subdirectory, samples files or any similar type directory or file.

10.3 Additional Terms; Certain Softimage Materials. This Section 10.3 (Additional Terms; Certain Softimage Materials) applies to the following Software that may be included within the Licensed Materials: (i) Autodesk Softimage Mod Tool software; and (ii) Autodesk Softimage Mod Tool Pro software.

10.3.1 Autodesk Softimage Mod Tool Software. In the event the Software is Autodesk Softimage Mod Tool Software then the applicable Exhibit B License Type is B. 4. (Educational Stand-alone (Individual) License).

10.3.2 Autodesk Softimage Mod Tool Pro Software. In the event the Software is Autodesk Softimage Mod Tool Pro Software, then the applicable Exhibit B License Type is B. 1. (Stand-alone (Individual) License), however, Licensee's Internal Business Needs are limited to the design, development and testing of an application program designed to function with the Software for Licensee's internal use in producing multimedia content in conjunction with Licensee's valid XNA® Creators Club Online Premium Membership.

11. Additional Terms: Quantity Take Off.

This Section 11 (Additional Terms; Quantity Take Off) applies to the Quantity Take Off Software that may be included within the Licensed Materials ("QTO Software"):

11.1 The QTO Software is based in part on the work of the Independent JPEG Group.

11.2 Portions of the QTO Software include Crystal Reports Runtime Software ("Runtime Software") licensed from Business Objects Software Ltd ("Business Objects"). Licensee's use of the Runtime Software is subject to the following terms:



- (a) Licensee agrees not to alter disassemble, decompile, translate, adapt or reverse-engineer the Runtime Software or the report file (.RPT) format;
- (b) Licensee agrees not to distribute the Runtime Software with any general-purpose report writing, data analysis or report delivery product or any other product that performs the same or similar functions as Business Objects' product offerings;
- (c) Licensee agrees not to use the Runtime Software to create for distribution a product that is generally competitive with Business Objects' product offerings;
- (d) Licensee agrees not to use the Runtime Software to create for distribution a product that converts the report file (.RPT) format to an alternative report file format used by any general-purpose report writing, data analysis or report delivery product that is not the property of Business Objects; and
- (e) Licensee agrees not to use the Crystal Reports Software on a rental or timesharing basis or to operate a service bureau facility for the benefit of third-parties.

11.3 BUSINESS OBJECTS AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. BUSINESS OBJECTS AND ITS SUPPLIERS SHALL HAVE NO LIABILITY WHATSOEVER UNDER THIS AGREEMENT OR IN CONNECTION WITH THE CRYSTAL REPORTS SOFTWARE.

12. Autodesk download technology may use the Akamai NetSession Interface, which may utilize a limited amount of your upload bandwidth and PC resources to connect you to a peered network and improve speed and reliability of Web content. The Akamai NetSession Interface is secure client-side networking technology that harnesses the power of your computer to deliver software and media available on the Akamai network. Your Akamai NetSession Interface works collectively with other Akamai NetSession Interfaces, along with thousands of Akamai edge servers, and runs as a networking service utilizing a limited amount of your computer's available resources. More information about the Akamai NetSession Interface is available here: <http://www.akamai.com/client>. By clicking "Accept" and using the Autodesk download technology, you accept the Akamai License Agreement (<http://www.akamai.com/eula>) in addition to the Autodesk License and Service Agreement.

Exhibit A  
Definitions





1. “Access” or “Accessible” means, with respect to a computer program or other materials, (a) to use or execute the computer program or other materials or (b) to use or otherwise benefit from the features or functionality of the computer program or other materials.
2. “Agreement” means this License and Services Agreement, including all exhibits and schedules thereto, as the License and Services Agreement may be amended from time to time in accordance with the terms thereof.
3. “Authorized User” means any individual person who Installs or Accesses, or is authorized to Install or Access, any of the Licensed Materials.
4. “Autodesk” means Autodesk, Inc., a Delaware corporation, except that if, Licensee acquires a license to the Autodesk Materials in (a) a country in Europe, Africa or the Middle East, “Autodesk” means Autodesk Development Sàrl or (b) a country in Asia, Oceania or the Asia-Pacific region, “Autodesk” means Autodesk Asia Pte Ltd.
5. “Autodesk License Manager” means the tool known as Autodesk License Manager or any future Autodesk tool for managing, monitoring or controlling Installation of or Access to Autodesk Materials.
6. “Autodesk Materials” means any materials distributed or made available by Autodesk, directly or indirectly, including Software, Supplemental Materials, User Documentation and Excluded Materials (whether or not licensed to Licensee).
7. “Computer” means (i) a single electronic device, with one or more central processing units (CPUs), that accepts information in digital or similar form and manipulates the information for a specific result based on a sequence of instructions, or (ii) a software implementation of such a device (or so-called virtual machine).
8. “Customer Information Form” means a form completed by or on behalf of Licensee and submitted to Autodesk or a Reseller, directly or indirectly, in connection with Licensee’s order for a license of Autodesk Materials, Relationship Program or Services.
9. “Educational Licensee” means a Licensee who is also (a) a Qualified Educational Institution, (b) Faculty, (c) Student or (d) Other Authorized Educational Licensee. An Educational Licensee may be required to show proof of eligibility if requested by Autodesk. Autodesk, in its sole discretion, retains the right to determine the eligibility of an Educational Licensee.
10. “Educational Purposes” means (i) in the case of a Qualified Educational Institution, Faculty or Other Authorized Educational Licensees, purposes directly related to learning, teaching, training, research and development that are part of the instructional functions





performed by a Qualified Educational Institution or Other Authorized Educational Licensee and (ii) in the case of Students, purposes related to learning, training, research or development. “Educational Purposes” does not include commercial, professional or any other for-profit purposes.

11. “Evaluation Purposes” means purposes of evaluation and demonstration of the capabilities of the Software or Supplemental Materials but excludes competitive analysis and any commercial, professional, or other for-profit purposes.

12. “Excluded Materials” means any materials, including Software, Supplemental Materials or User Documentation (and including, without limitation, any computer programs, modules or components of a computer program, functionality or features of a computer program, explanatory printed or electronic materials, content or other materials, if any), that may be provided or become available to Licensee, by any means, or that are on any media delivered to Licensee, for which (a) Licensee does not have a License Identification, or (b) Licensee has not paid (and continued to pay) the applicable fees. Licensee acknowledges that Excluded Materials are included on media or via download for convenience of the licensing mechanism used by Autodesk, and inclusion does not in any way authorize, expressly or impliedly, a right to use such Excluded Materials.

13. “Faculty” means an individual person who is an employee or independent contractor working for a Qualified Educational Institution.

14. “Install” and “Installation” means, with respect to a computer program or other materials, to copy the program or other materials onto a hard disk or other storage medium.

15. “License Identification” means one or more designations by Autodesk that set forth the License Type (among other things) for Licensee’s license of the Licensed Materials. The License Identification may be (a) located (i) in the Licensed Materials (e.g., in an “About” box, license information dialog box, or text file of Software), (ii) on or with Autodesk packaging, or (iii) in a written confirmation or other notice issued to Licensee by Autodesk and transmitted via email, facsimile, physical delivery, or otherwise, or (b) obtained from Autodesk on request. For clarification, License Identification does not include a designation, confirmation, packaging or other document provided by a Reseller or other third party.

16. “License Type” means a type of license specified by Autodesk for



Autodesk Materials, including the types set forth in Exhibit B.

License Type includes the terms specified by Autodesk for each type of license, including the applicable terms set forth in Exhibit B.

License Type is determined by Autodesk and may be specified in the applicable License Identification.

17. “Licensed Materials” means Software, Supplemental Materials and User Documentation (a) downloaded by clicking on the “I accept” button or other button or mechanism associated with this Agreement or by otherwise indicating assent to this Agreement, (b) delivered prepackaged with this Agreement, or (c) otherwise accompanied by this Agreement, provided that (i) in the case of Software, the Software is identified in an applicable License Identification, and (ii) Licensee has paid (and continues to pay) the applicable fees. Licensed Materials also includes Supplemental Materials and User Documentation that Autodesk provides or makes available to Licensee for use with Software licensed under this Agreement if there are no separate terms for such materials specified by Autodesk. Licensed Materials includes, without limitation, any error corrections, patches, service packs, updates and upgrades to, and new versions of, the Licensed Materials that Autodesk provides or makes available to Licensee under Licensee’s then-current license. Licensee acknowledges that availability of Upgrades and new versions may be subject to additional fees and the Relationship Program Terms. In addition, Licensed Materials includes, without limitation, any Previous Versions and other Autodesk Materials that Licensee receives or retains pursuant to the Relationship Program Terms, but only for so long as and to the extent expressly authorized by the Relationship Program Terms. Notwithstanding the foregoing (or any other provision of this Agreement), Licensed Materials in all cases excludes Excluded Materials.

18. “Licensee” means (a) the company or other legal entity on behalf of which Autodesk Materials are acquired, if the Autodesk Materials are acquired on behalf of such an entity (e.g., by an employee, independent contractor, or other authorized representative), or (b) if there is no such entity, the individual who accepts this Agreement (e.g., by selecting the “I accept” button or other button or mechanism associated with this Agreement or otherwise indicating assent to this Agreement, or by installing, downloading, accessing, or otherwise copying or using all or any portion of the Autodesk Materials). For clarification, “Licensee” refers only to a single, specifically identified legal entity or individual, and does not include any subsidiary or affiliate of any such legal entity or



individual or any other related person.

19. “Licensee’s Internal Business Needs” means, in reference to Licensed Materials, the use of such Licensed Materials (and the features and functionality thereof) by Licensee’s own Personnel to meet the internal requirements of Licensee’s business in the ordinary course of such business, provided that Internal Business Needs will in no event include providing or making available such Licensed Materials (or the features or functionality thereof) to any third party.

20. “Networked Basis” means a computing environment that includes a Computer acting as a file server which allows the Licensed Materials Installed on such Computer to be uploaded and Installed to, and operated, viewed or otherwise Accessed from, other Computers through a local area network connection or through a VPN connection subject to compliance with the VPN Requirements.

21. “Open Source” means any software code that: (a) contains, or is derived in any manner, (in whole or in part), from any software that is distributed as free software, open source software, shareware (e.g., Linux), or similar licensing or distribution models; and (b) is subject to any agreement with terms requiring that using, copying, modifying or redistributing the software requires that such software and/or the derivative works of such software be: (i) disclosed and/or distributed in source code form; (ii) be licensed for the purpose of making derivative works; and/or (iii) be redistributed free of charge; including, without limitation, software licensed or distributed under any of the following licenses or distribution models, or licenses or distribution models similar to, GNU’s General Public License (GPL) or Lesser/Library GPL (LGPL).

22. “Other Authorized Educational Licensee” means a Licensee described at <http://www.autodesk.com/educationterms> or as otherwise authorized in writing by Autodesk.

23. “Permitted Number” means a maximum number (e.g., number of authorized users, number of concurrent users, number of computers, sessions, etc.) applicable to a license of the Licensed Materials and to the License Type associated with such license. Such number is determined by Autodesk and may be specified in the applicable License Identification.

24. “Personal Learning Purposes” means (i) personal learning as a Student or (ii) in the case of a non-Student, personal learning, excluding (a) in-person or online classroom learning in any degree-granting or certificate granting program, and (b) learning related to any commercial, professional or other for-profit purposes.



25. “Personnel” means (a) Licensee’s individual employees and (b) individual persons who are independent contractors working on Licensee’s premises and who Install and Access the Licensed Materials only on and through Computers owned or leased and controlled by Licensee.
26. “Previous Versions” means, as to any then-current release of Licensed Materials, a prior release of the Licensed Materials as to which such then-current release is a successor or substitute (as determined by Autodesk).
27. “Qualified Educational Institution” means an educational institution which has been accredited by an authorized governmental agency within its applicable local, state, provincial, federal, or national government and has the primary purpose of teaching its enrolled students. Examples, without limitation, of entities that are included and excluded from this definition are described at <http://www.autodesk.com/educationterms>.
28. “Relationship Program” means (i) Subscription or (ii) a rental program offered generally by Autodesk pursuant to which Autodesk makes available Licensed Materials.
29. “Relationship Program Terms” means the terms for a Relationship Program set forth at <http://usa.autodesk.com/company/legal-notice-trademarks/support-terms-and-conditions> or any successor or supplemental web page of Autodesk (the URL for which may be obtained on Autodesk’s website or on request).
30. “Reseller” means a distributor or reseller authorized directly or indirectly by Autodesk to distribute authentic Autodesk Materials to Licensee.
31. “Services” means services (including the results of services) provided or made available by Autodesk, including, without limitation, support services, storage, simulation and testing services, training and other benefits, but excluding services provided or made available as part of a Relationship Program.
32. “Services Terms” means the terms for Services set forth at a location where a user may order or register for, or that is displayed in connection with ordering or registering for, such Services (e.g., a web page) or, if there are no such terms, at <http://usa.autodesk.com/company/legal-notice-trademarks/terms-of-service> (if the Services are web services) or <http://usa.autodesk.com/company/legal-notice-trademarks/terms-of-use> for all other Services) or any successor or supplemental web pages of Autodesk.



33. “Software” means the Autodesk FBX SDK computer program, or a module or component of a computer program, including the software development kit (“SDK”) distributed or made available by Autodesk.

The term “Software” may also refer to functions and features of a computer program.

34. “Stand-alone Basis” means (i) the Licensed Materials are Installed on a single Computer and (ii) the Licensed Materials cannot be Installed on, or operated, viewed or otherwise Accessed from or through any other Computer (e.g., through a network connection of any kind).

35. “Student” means an individual person enrolled as a student at a Qualified Educational Institution.

36. “Subscription” is the program offered generally by Autodesk under which Autodesk provides (among other things) updates and upgrades to, new versions of, and certain other support, services and training relating to Autodesk Materials.

37. “Supplemental Materials” means materials, other than Software and related User Documentation, that are distributed or made available by Autodesk for use with Software. Supplemental Materials include, without limitation, (a) content, such as sample drawings and designs, modules for drawings and designs, and representations of elements used in drawings and designs (e.g., buildings, parts of buildings, fixtures, furniture, bridges, roads, characters, backgrounds, settings and animations), (b) background materials, such as building codes and descriptions of building practices, (c) tools for rendering the output of the Software, such as fonts, and (d) Development Materials, application programming interfaces (APIs), and other similar developer materials (including API Information).

37 “Territory” (a) means the country, countries or jurisdiction(s) specified in the License Identification, or (b) if there is no such License Identification, or no country or jurisdiction is specified in the License Identification, means the country in which Licensee acquires a license to the Autodesk Materials. If the License Identification specifies, or Licensee acquires the Autodesk Materials in, a member country of the European Union or the European Free Trade Association, Territory means all the countries of the European Union and the European Free Trade Association.

38. “Uninstall” means to remove or disable a copy of Autodesk Materials from a hard drive or other storage medium through any means or otherwise to destroy or make unusable a copy of the Autodesk Materials.

39. “Upgrade” means a full commercial version of Licensed Materials



(a) which is a successor to or substitute for a qualifying prior release (and may incorporate error corrections, patches, service packs and updates and upgrades to, and may enhance or add to the features or functionality of, the prior release) or different release of Licensed Materials, (b) is provided to a Licensee who has previously licensed the applicable qualifying prior or different release from Autodesk and (c) for which Autodesk generally charges a separate fee or makes available solely to customers under a Relationship Program. Whether Autodesk Materials are an Upgrade may be specified in the applicable License Identification. Whether Autodesk Materials are an Upgrade and whether Licensee has met the qualifications to license particular Autodesk Materials as an Upgrade are determined by Autodesk.

40. "User Documentation" means the explanatory or instructional materials for Software or Supplemental Materials (including materials regarding use of the Software or Supplemental Materials), whether in printed or electronic form, that Autodesk or a Reseller incorporates in the Software or Supplemental Materials (or the packaging for the Software or Supplemental Materials) or otherwise provides to its customers when or after such customers license, acquire or Install the Software or Supplemental Materials.

41. "VPN Requirements" means (i) the Licensed Materials are Accessed through a secure virtual private network ("VPN"); (ii) the maximum number of concurrent users Accessing the Licensed Materials (on a Networked Basis or through the VPN) does not exceed the Permitted Number at any time; (iii) all copies of the Licensed Materials are Installed and Accessed exclusively in conjunction with the technical protection device (if any) supplied with the Licensed Materials; and (iv) the VPN connection is secure and complies with current industry standard encryption and protection mechanisms.

## Exhibit B

### License Types

1. Stand-alone (Individual) License. If the License Identification identifies the License Type as a "Stand-alone License" or as an "Individual License," Licensee may Install a single primary copy of the specific release of the Licensed Materials designated in the applicable License Identification on one (1) Computer, on a Stand-alone Basis, and permit Access to such primary copy of the Licensed Materials solely by Licensee's Personnel, and solely for Licensee's Internal Business Needs. Licensee may also Install a



single additional copy of such Licensed Materials on one (1) additional Computer, on a Stand-alone Basis; provided that (i) such additional copy of the Licensed Materials is Accessed solely by the same person as the primary copy; (ii) such person is Licensee (if Licensee is an individual) or an employee of Licensee; (iii) such person Accesses the additional copy solely to perform work while away from that person's usual work location and solely for Licensee's Internal Business Needs; and (iv) the primary and additional copies are not Accessed at the same time. Stand-alone (Individual) License is for a perpetual term, except as otherwise provided in this Agreement.

2. Multi-seat Stand-alone License. If the License Identification identifies the License Type as a "Multi-seat Stand-alone License," Licensee may Install primary copies of the specific release of the Licensed Materials designated in the applicable License Identification on up to the Permitted Number of Computers, on a Stand-alone Basis, and permit Access to such copies of the Licensed Materials solely by Licensee's Personnel, and solely for Licensee's Internal Business Needs. Licensee may also Install additional copies of such Licensed Materials on additional Computers in an amount up to the Permitted Number of Computers, on a Stand-alone Basis; provided that (i) each additional copy of such Licensed Materials is Accessed solely by the same person as the primary copy; (ii) such person is Licensee (if Licensee is an individual) or an employee of Licensee; (iii) such person Accesses the additional copy solely to perform work while away from that person's usual work location and solely for Licensee's Internal Business Needs; and (iv) the primary and additional copies are not Accessed at the same time. Multi-seat Stand-alone License is for a perpetual term, except as otherwise provided in this Agreement.

3. Network License. If the License Identification identifies the License Type for the Licensed Materials as a "Network License," Licensee may Install copies of the specific release of the Licensed Materials designated in the applicable License Identification on a Computer and permit Access to such Licensed Materials on multiple Computers, on a Networked Basis, solely by Licensee's Personnel, solely for Licensee's Internal Business Needs, only so long as the maximum number of concurrent Authorized Users does not exceed the Permitted Number of Authorized Users or other limits imposed by the Autodesk License Manager (if any). Licensee may, at Licensee's option, also Install the Licensed Materials on a Hot Backup Server; provided that Licensee may Access the Licensed Materials on the Hot





Backup Server only during the time period when, and solely for as long as, the primary Installed copy of the Licensed Materials is inoperable and only subject to the same terms and conditions as are applicable to the primary Installed copy. A “Hot Backup Server” means a file server Computer that has a second copy of the Software and Supplemental Materials Installed but that is not permitted to be Accessible except when the primary Installed copy of the Software and Supplemental Materials are inoperable and only for so long as such primary Installed copy is inoperable. A Network License is for a perpetual term, except as otherwise provided in this Agreement.

4. Educational Stand-alone (Individual) License. If the License Identification identifies the License Type as an “Educational Stand-alone (Individual) License,” an Educational Licensee may Install a copy of the specific release of the Licensed Materials designated in the applicable License Identification on one (1) Computer, subject to certain functional limitations described in Section 6.3 (Affected Data), on a Stand-alone Basis, and permit Access to such copy of the Licensed Materials solely by an Educational Licensee solely for Educational Purposes. An Educational Stand-alone (Individual) License is for a fixed term specified in the applicable License Identification or, if no such term is specified, the term is thirty-six (36) months from Installation or as otherwise authorized in writing by Autodesk.

5. Educational Multi-seat Stand-alone License. If the License Identification identifies the License Type as an “Educational Multi-seat Stand-alone License,” an Educational Licensee may Install copies of the specific release of the Licensed Materials designated in the applicable License Identification on up to the Permitted Number of Computers, subject to certain functional limitations described in Section 6.3 (Affected Data), on a Stand-alone Basis, and permit Access to such copies of the Licensed Materials solely by Educational Licensees solely for Educational Purposes. An Educational Multi-seat Stand-alone License is for a fixed term specified in the applicable License Identification or, if no such term is specified, the term is thirty-six (36) months from Installation or as otherwise authorized in writing by Autodesk.

6. Educational Network License. If the License Identification identifies the License Type as an “Educational Network License,” an Educational Licensee may Install copies of the specific release of the Licensed Materials designated in the applicable License Identification on a single file server Computer, subject to certain functional limitations described in Section 6.3 (Affected Data), and





Access such Licensed Materials on multiple Computers on a Networked Basis, and permit Access to such copies of the Licensed Materials solely by Educational Licensees solely for Educational Purposes, only so long as the maximum number of concurrent Authorized Users does not exceed the Permitted Number of Authorized Users. An Educational Network License is for a fixed term specified in the applicable License Identification or, if no such term is specified, the term is thirty-six (36) months from Installation or as otherwise authorized in writing by Autodesk.

7. Personal Learning License. If the License Identification identifies the License Type as a “Personal Learning License”, Licensee may Install a copy of the specific release of the Licensed Materials designated in the applicable License Identification on one (1) Computer, subject to certain functional limitations described in Section 6.3 (Affected Data), on a Stand-alone Basis, and permit Access to such copy of the Licensed Materials solely by Licensee, as an individual, solely for Personal Learning Purposes and only at and from locations that are not labs or classrooms and are not operated for commercial, professional or for-profit purposes. A Personal Learning License Stand-alone is for a fixed term specified in the applicable License Identification. If no such term is specified, the term is thirteen (13) months from Installation.

8. Evaluation/Demonstration/Trial. If Autodesk identifies the License Type as a “demonstration”, “evaluation”, “trial,” “not for resale” or “NFR” version (each, an “Evaluation License”) in the applicable License Identification, Licensee may Install a copy of the specific release of the Licensed Materials designated in the applicable License Identification on one (1) Computer, subject to certain functional limitations described in Section 6.3 (Affected Data), on a Stand-alone Basis, and permit Access to such copy of the Licensed Materials, solely by Licensee’s Personnel, solely for Evaluation Purposes, only so long as the maximum number of concurrent Authorized Users does not exceed one (1), and only from Licensee’s work location. An Evaluation License is for a fixed term specified in the applicable License Identification, or if no such term is specified, the term is thirty (30) days from Installation or as otherwise authorized in writing by Autodesk.

9. Fixed Term/Limited Duration/Rental License. If Autodesk identifies a license in the applicable License Identification as being for a specified period or limited duration or as having a fixed term or as a rental license, Licensee’s right to Install and Access the Licensed Materials will continue only for the period, duration or

term specified in the License Identification. Such Installation and Access will be in accordance with and subject to the applicable License Type and Permitted Number. If Autodesk identifies a license in the applicable License Identification as being for a specified period or limited duration, or as having a fixed term, or a rental license but no period, duration or term is specified in the License Identification, the period, duration or term will be ninety (90) days from Installation (or the period specified in Sections B.6 (Educational Network License), B.7 (Personal Learning License) or B.8 (Evaluation/Demonstration/Trial) of this Exhibit B with respect to the licenses described in those sections).

10. Session Specific Network License. If the License Identification identifies the License Type as a "Session Specific Network License", Licensee may install one (1) copy of the specific release of the Licensed Materials designated in the applicable License Identification on a Computer and permit Access to such Licensed Materials from multiple Computers through a Supported Virtualization Application, on a Networked Basis, solely by Licensee's Personnel, solely for Licensee's Internal Business needs, only so long as the maximum number of concurrent Sessions does not exceed the Permitted Number or other limits imposed by the Autodesk License Manager tool (if any). For purposes of this Session Specific Network License, (a) a "Session" is defined as a single interactive information exchange between two Computers that are connected through a Supported Virtualization Application, and (b) "Supported Virtualization Application(s)" are those third party virtualization applications or methods that are specifically identified as supported by Autodesk in the User Documentation for the Licensed Materials. With respect to the applicable Supported Virtualization Application, Licensee agrees to activate any available session tracking mechanism, not disable any such session tracking mechanism and to retain all records generated by such session tracking mechanism. A Session Specific Network License is for a perpetual term, except as otherwise provided in this Agreement.

## 5.4. Apache Log4net

Name	Version	Comments / usage	Target device
Apache Log4net	2.0.3	Logging functions in EB GUIDE Studio	

### Further information

Apache log4net Copyright 2004-2013 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (<http://www.apache.org/>).

### Copyright text

Copyright 2004-2013 The Apache Software Foundation

### License text

Apache License Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined

by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition,

"control" means

(i) the power, direct or indirect, to cause the direction or management

of such entity, whether by contract or otherwise, or

(ii) ownership of fifty percent (50%) or more of the outstanding shares, or

(iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited

to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a

Source form, including but not limited to compiled object code, generated documentation,

and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under



the License, as indicated by a copyright notice that is included in or attached to the work

(an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on

(or derived from) the Work and for which the editorial revisions, annotations, elaborations,

or other modifications represent, as a whole, an original work of authorship. For the purposes of

this License, Derivative Works shall not include works that remain separable from, or merely

link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work

and any modifications or additions to that Work or Derivative Works thereof, that is intentionally

submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal

Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition,

"submitted" means any form of electronic, verbal, or written communication sent to the Licensor or

its representatives, including but not limited to communication on electronic mailing lists, source

code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor

for the purpose of discussing and improving the Work, but excluding communication that is

conspicuously marked or otherwise designated in writing by the copyright owner as

"Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a

Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each

Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge,

royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of,



publicly display, publicly perform, sublicense, and distribute the Work and such Derivative

Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor

hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable

(except as stated in this section) patent license to make, have made, use, offer to sell, sell,

import, and otherwise transfer the Work, where such license applies only to those patent claims

licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or

by combination of their Contribution(s) with the Work to which such Contribution(s)

was submitted. If You institute patent litigation against any entity (including a

cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution

incorporated within the Work constitutes direct or contributory patent infringement,

then any patent licenses granted to You under this License for that Work shall terminate

as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works

thereof in any medium, with or without modifications, and in Source or Object form, provided

that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License;

and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all

copyright, patent, trademark, and attribution notices from the Source form of the Work,

excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its

distribution, then any Derivative

Works that You distribute must include a readable copy of the attribution notices contained

within such NOTICE file, excluding those notices that do not pertain to any part of the

Derivative Works, in at least one of the following places: within a NOTICE text file

distributed as part of the Derivative Works; within the Source form or documentation,

if provided along with the Derivative Works; or, within a display generated by the

Derivative Works, if and wherever such third-party notices normally appear.

The contents of the NOTICE file are for informational purposes only and do

not modify the License. You may add Your own attribution notices within Derivative

Works that You distribute, alongside or as an addendum to the NOTICE text from the Work,

provided that such additional attribution notices cannot be construed as modifying

the License.

You may add Your own copyright statement to Your modifications and may provide additional or

different license terms and conditions for use, reproduction, or distribution of Your

modifications, or for any such Derivative Works as a whole, provided Your use, reproduction,

and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution

intentionally submitted for inclusion in the Work by You to the Licensor shall be under the

terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate

license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks,



service marks, or product names of the Licensor, except as required for reasonable and customary

use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor

provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT

WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation,

any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A

PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or

redistributing the Work and assume any risks associated with Your exercise of permissions

under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including

negligence), contract, or otherwise, unless required by applicable law (such as deliberate

and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You

for damages, including any direct, indirect, special, incidental, or consequential damages of

any character arising as a result of this License or out of the use or inability to use the Work

(including but not limited to damages for loss of goodwill, work stoppage, computer failure or

malfunction, or any and all other commercial damages or losses), even if such Contributor has

been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative

Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty,

indemnity, or other liability obligations and/or rights consistent with this License. However,

in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility,

not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold

each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## 5.5. AvalonEdit

Name	Version	Comments / usage	Target device
AvalonEdit	5.0.2	WPF control for EB GUIDE Script editor	

### Copyright text

Copyright (c) 2014 AlphaSierraPapa for the SharpDevelop Team  
Copyright (c) 2009 Daniel Grunwald

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.6. CommonServiceLocator

Name	Version	Comments / usage	Target device
CommonServiceLocator	1.3.0	WPF programming	



## Copyright text

Please refer to the open source project:

<https://github.com/unitycontainer/commonservicelocator/releases/tag/v1.3.0>

## License text

Microsoft Public License (MS-PL)

This license governs use of the accompanying software. If you use the software, you accept this license. If you do not accept the license, do not use the software.

### 1. Definitions

The terms "reproduce," "reproduction," "derivative works," and "distribution" have the same meaning here as under U.S. copyright law.

A "contribution" is the original software, or any additions or changes to the software.

A "contributor" is any person that distributes its contribution under this license.

"Licensed patents" are a contributor's patent claims that read directly on its contribution.

### 2. Grant of Rights

(A) Copyright Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution, and distribute its contribution or any derivative works that you create.

(B) Patent Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

### 3. Conditions and Limitations

(A) No Trademark License- This license does not grant you rights to use any contributors' name, logo, or trademarks.

(B) If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.

(C) If you distribute any portion of the software, you must retain all

copyright, patent, trademark, and attribution notices that are present in the software.

(D) If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.

(E) The software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

## 5.7. DirectXMesh

Name	Version	Comments / usage	Target device
DirectXMesh	VS 2017	algorithms for mesh optimizations	

### Copyright text

Copyright (c) 2014-2019 Microsoft Corp

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR

IMPLIED,  
INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS  
FOR A  
PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR  
COPYRIGHT  
HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN  
ACTION OF  
CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH  
THE SOFTWARE  
OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.8. dlmalloc

Name	Version	Comments / usage	Target device
dlmalloc	2.8.6	Needed for implementing the Nuance heap, as replacement for the vocon_ext_heap.dll sample library from Nuance	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Further information

This is a version (aka dlmalloc) of malloc/free/realloc written by Doug Lea and released to the public domain, as explained at <http://creativecommons.org/publicdomain/zero/1.0/> Send questions, comments, complaints, performance data, etc to [dl@cs.oswego.edu](mailto:dl@cs.oswego.edu)

### Copyright text

Version 2.8.6 Wed Aug 29 06:57:58 2012 Doug Lea

## License text

Public Domain - CC0 1.0 Universal - Statement of Purpose

The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and

Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner")

of an original work of authorship and/or a database (each, a "Work").

Certain owners wish to permanently relinquish those rights to a Work for the purpose of

contributing to a commons of creative, cultural and scientific works

("Commons") that the

public can reliably and without fear of later claims of infringement build upon, modify,

incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever

and for any purposes, including without limitation commercial purposes.

These owners may contribute

to the Commons to promote the ideal of a free culture and the further production of creative,

cultural and scientific works, or to gain reputation or greater distribution for their Work

in part through the use and efforts of others.

For these and/or other purposes and motivations, and without any expectation of additional

consideration or compensation, the person associating CC0 with a Work (the "Affirmer"),

to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily

elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge

of his or her Copyright and Related Rights in the Work and the meaning and intended legal

effect of CC0 on those rights.

1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright

and related or neighboring rights ("Copyright and Related Rights").

Copyright and Related Rights include, but are not limited to, the following:

i. the right to reproduce, adapt, distribute, perform, display, communicate, and translate

a Work;

ii. moral rights retained by the original author(s) and/or

performer(s);

iii. publicity and privacy rights pertaining to a person's image or likeness depicted in a Work;

iv. rights protecting against unfair competition in regards to a Work, subject to the

limitations in paragraph 4(a), below;

v. rights protecting the extraction, dissemination, use and reuse of data in a Work;

vi. database rights (such as those arising under Directive 96/9/EC of the European Parliament

and of the Council of 11 March 1996 on the legal protection of databases, and under any

national implementation thereof, including any amended or successor version of such directive);

and

vii. other similar, equivalent or corresponding rights throughout the world based on applicable

law or treaty, and any national implementations thereof.

2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable law,

Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons,

and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes

of action, whether now known or unknown (including existing as well as future claims and causes

f action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided

by applicable law or treaty (including future time extensions), (iii) in any current or future

medium and for any number of copies, and (iv) for any purpose whatsoever, including without

limitation commercial, advertising or promotional purposes (the "Waiver").

Affirmer makes the Waiver for the benefit of each member of the public at large and to the

detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be

subject to revocation, rescission, cancellation, termination, or any other legal or equitable

action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's

express Statement of Purpose.

3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid

or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted

taking into account Affirmer's express Statement of Purpose. In addition, to the extent the

Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non

transferable, non sublicensable, non exclusive, irrevocable and unconditional license to

exercise Affirmer's Copyright and Related Rights in the Work

(i) in all territories worldwide,

(ii) for the maximum duration provided by applicable law or treaty (including future time extensions),

(iii) in any current or future medium and for any number of copies, and

(iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License").

The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work.

Should any part of the License for any reason be judged legally invalid or ineffective

under applicable law, such partial invalidity or ineffectiveness shall not invalidate the

remainder of the License, and in such case Affirmer hereby affirms that he or she will not

(i) exercise any of his or her remaining Copyright and Related Rights in the Work or

(ii) assert any associated claims and causes of action with respect to the Work,

in either case contrary to Affirmer's express Statement of Purpose.

4. Limitations and Disclaimers.

a. No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.

b. Affirmer offers the Work as-is and makes no representations or warranties of any kind

concerning the Work, express, implied, statutory or otherwise, including without limitation

warranties of title, merchantability, fitness for a particular purpose, non infringement,  
or the absence of latent or other defects, accuracy, or the present or absence of errors,  
whether or not discoverable, all to the greatest extent permissible under applicable law.

c. Affirmer disclaims responsibility for clearing rights of other persons that may apply to  
the Work or any use thereof, including without limitation any person's Copyright and Related  
Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary  
consents, permissions or other rights required for any use of the Work.

d. Affirmer understands and acknowledges that Creative Commons is not a party to this document  
and has no duty or obligation with respect to this CC0 or use of the Work.

## 5.9. Extended WPF Toolkit Community Edition

Name	Version	Comments / usage	Target device
Extended WPF Toolkit Community Edition	3.0.0	Used for UI controls in EB GUIDE Studio	

### Copyright text

Copyright (C) 2007-2016 Xceed Software Inc.  
for: ExtendedWPFToolkitSolution/ Src/ Xceed.Wpf.Toolkit.LiveExplorer/  
Core/ CodeFormatting/ CSharpFormat.cs  
Copyright (C) 2001-2003 Jean-Claude Manoli [jc@manoli.net]

### License text

This license governs use of the accompanying software. If you use the software, you accept this license. If you do not accept the license, do not use the software.

#### 1. Definitions

The terms "reproduce," "reproduction," "derivative works," and "distribution" have the same meaning here as under U.S. copyright law. A "contribution" is the original software, or any additions or changes to



the software.

A "contributor" is any person that distributes its contribution under this license.

"Licensed patents" are a contributor's patent claims that read directly on its contribution.

## 2. Grant of Rights

(A) Copyright Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution, and distribute its contribution or any derivative works that you create.

(B) Patent Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

## 3. Conditions and Limitations

(A) No Trademark License- This license does not grant you rights to use any contributors' name, logo, or trademarks.

(B) If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.

(C) If you distribute any portion of the software, you must retain all copyright, patent, trademark, and attribution notices that are present in the software.

(D) If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.

(E) The software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

for: ExtendedWPFToolkitSolution/ Src/ Xceed.Wpf.Toolkit.LiveExplorer/  
Core/ CodeFormatting/ CSharpFormat.cs

\* This software is provided 'as-is', without any express or implied warranty.



```
* In no event will the author(s) be held liable for any damages arising
from
* the use of this software.
* Permission is granted to anyone to use this software for any purpose,
* including commercial applications, and to alter it and redistribute it
* freely, subject to the following restrictions:
* 1. The origin of this software must not be misrepresented; you must
not
* claim that you wrote the original software. If you use this
software
* in a product, an acknowledgment in the product documentation would
be
* appreciated but is not required.
* 2. Altered source versions must be plainly marked as such, and must
not
* be misrepresented as being the original software.
* * 3. This notice may not be removed or altered from any source
distribution.
*/
```

## 5.10. FluentCommandLineParser

Name	Version	Comments / usage	Target device
FluentCommand- dLineParser	1.5.0.20	.NET C# command line parser	

### Copyright text

Copyright (c) 2012 - 2013, Simon Williams  
All rights reserved.

### License text

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided  
that the following conditions are met:

Redistributions of source code must retain the above copyright notice,  
this list of conditions and the  
following disclaimer.

Redistributions in binary form must reproduce the above copyright notice,

this list of conditions and  
the following disclaimer in the documentation and/or other materials  
provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 5.11. FreeType

Name	Version	Comments / usage	Target device
FreeType	2.9	Text rendering solution	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.



## Further information

The FreeType 2 font engine is copyrighted work and cannot be used legally without a software license. In order to make this project usable to a vast majority of developers, we distribute it under two mutually exclusive open-source licenses. This means that \*you\* must choose \*one\* of the two licenses described below, then obey all its terms and conditions when using FreeType 2 in any of your projects or products. The FreeType License, found in the file `FTL.TXT`, which is similar to the original BSD license \*with\* an advertising clause that forces you to explicitly cite the FreeType project in your product's documentation. All details are in the license file. This license is suited to products which don't use the GNU General Public License. Note that this license is compatible to the GNU General Public License version 3, but not version 2. The GNU General Public License version 2, found in `GPLv2.TXT` (any later version can be used also), for programs which already use the GPL. Note that the FTL is incompatible with GPLv2 due to its advertisement clause. The contributed BDF and PCF drivers come with a license similar to that of the X Window System. It is compatible to the above two licenses (see file src/bdf/README and src/pcf/README). The same holds for the files `ftstash.c` and `ftstash.h`; their code was part of the BDF driver in earlier FreeType versions. The gzip module uses the zlib license (see src/gzip/zlib.h) which too is compatible to the above two licenses. The MD5 checksum support (only used for debugging in development builds) is in the public domain.

----- for ftstash.h/ftstash.c: Copyright 2000 Computing Research Labs, New Mexico State University Copyright 2001-2015 Francesco Zappa Nardelli Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE COMPUTING RESEARCH LAB OR NEW MEXICO STATE UNIVERSITY BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

----- md5.c: Public-domain md5.h: Public-domain This is an OpenSSL-compatible implementation of the RSA Data Security, Inc. MD5 Message-Digest Algorithm (RFC 1321). Homepage: <http://openwall.info/wiki/people/solar/software/public-domain-source-code/> d5 Author: Alexander Peslyak, better known as Solar Designer <solar at openwall.com> This software was written by Alexander Peslyak in 2001. No copyright is claimed, and the software is hereby placed in the public domain. In case this attempt to disclaim copyright and place the software in the public domain is deemed null and void, then the software is Copyright (c) 2001 Alexander Peslyak and it is hereby released to the general public under the following terms: Redistribution and use in source and binary forms, with or without modification, are permitted. There's ABSOLUTELY NO WARRANTY, express or implied. (This is a heavily cut-down "BSD license".)

## Copyright text

Portions of this software are copyright 2006-2017 by David Turner, Robert

Wilhelm, and Werner Lemberg. The FreeType Project ([www.freetype.org](http://www.freetype.org)). All rights reserved.

## License text

The FreeType Project LICENSE

2006-Jan-27

Copyright 1996-2002, 2006 by David Turner, Robert Wilhelm, and Werner Lemberg

Introduction

The FreeType Project is distributed in several archive packages; some of them may contain,

in addition to the FreeType font engine, various tools and contributions which rely on, or relate to, the FreeType Project.

This license applies to all files found in such packages, and which do not fall under their

own explicit license. The license affects thus the FreeType font engine, the test programs,

documentation and makefiles, at the very least.

This license was inspired by the BSD, Artistic, and IJG (Independent JPEG Group) licenses,

which all encourage inclusion and use of free software in commercial and freeware products

alike. As a consequence, its main points are that:

\* We don't promise that this software works. However, we will be interested in any kind of bug reports. ('as is' distribution)

\* You can use this software for whatever you want, in parts or full form, without having to pay us. ('royalty-free' usage)

\* You may not pretend that you wrote this software. If you use it, or only parts of it, in a program, you must acknowledge somewhere in your documentation that you have used the FreeType code. ('credits')

We specifically permit and encourage the inclusion of this software, with or without modifications,

in commercial products. We disclaim all warranties covering The FreeType Project and assume no

liability related to The FreeType Project.

Finally, many people asked us for a preferred form for a credit/disclaimer to use in compliance

with this license. We thus encourage you to use the following text:

" Portions of this software are copyright © <year> The FreeType Project ([www.freetype.org](http://www.freetype.org)).

All rights reserved."

Please replace <year> with the value from the FreeType version you actually use.

Legal Terms

0. Definitions

Throughout this license, the terms 'package', 'FreeType Project', and 'FreeType archive' refer

to the set of files originally distributed by the authors (David Turner, Robert Wilhelm, and

Werner Lemberg) as the 'FreeType Project', be they named as alpha, beta or final release.

'You' refers to the licensee, or person using the project, where 'using' is a generic term

including compiling the project's source code as well as linking it to form a 'program' or

'executable'. This program is referred to as 'a program using the FreeType engine'.

This license applies to all files distributed in the original FreeType Project, including

all source code, binaries and documentation, unless otherwise stated in the file in its

original, unmodified form as distributed in the original archive. If you are unsure

whether or not a particular file is covered by this license, you must contact

us to verify this.

The FreeType Project is copyright (C) 1996-2000 by David Turner, Robert Wilhelm, and

Werner Lemberg. All rights reserved except as specified below.

1. No Warranty

THE FREETYPE PROJECT IS PROVIDED 'AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY OF THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY DAMAGES CAUSED BY THE USE OR THE INABILITY TO USE, OF THE FREETYPE PROJECT.

2. Redistribution

This license grants a worldwide, royalty-free, perpetual and irrevocable right and license to



use, execute, perform, compile, display, copy, create derivative works of, distribute and sublicense the FreeType Project (in both source and object code forms) and derivative works thereof for any purpose; and to authorize others to exercise some or all of the rights granted herein, subject to the following conditions:

- \* Redistribution of source code must retain this license file ('FTL.TXT') unaltered; any additions, deletions or changes to the original files must be clearly indicated in accompanying documentation. The copyright notices of the unaltered, original files must be preserved in all copies of source files.
- \* Redistribution in binary form must provide a disclaimer that states that the software is based in part of the work of the FreeType Team, in the distribution documentation. We also encourage you to put an URL to the FreeType web page in your documentation, though this isn't mandatory.

These conditions apply to any software derived from or based on the FreeType Project, not just the unmodified files. If you use our work, you must acknowledge us. However, no fee need be paid to us.

### 3. Advertising

Neither the FreeType authors and contributors nor you shall use the name of the other for commercial, advertising, or promotional purposes without specific prior written permission.

We suggest, but do not require, that you use one or more of the following phrases to refer to this software in your documentation or advertising materials:

- 'FreeType Project',
- 'FreeType Engine', 'FreeType library', or 'FreeType Distribution'.

As you have not signed this license, you are not required to accept it. However, as the FreeType Project is copyrighted material, only this license, or another one contracted with the authors, grants you the right to use, distribute, and modify it. Therefore, by using,

distributing, or modifying the FreeType Project, you indicate that you understand and accept all the terms of this license.

#### 4. Contacts

There are two mailing lists related to FreeType:

\* [freetype@nongnu.org](mailto:freetype@nongnu.org) - Discusses general use and applications of FreeType, as well as future and wanted additions to the library and distribution. If you are looking for support, start in this list if you haven't found anything to help you in the documentation.

\* [freetype-devel@nongnu.org](mailto:freetype-devel@nongnu.org) - Discusses bugs, as well as engine internals, design issues, specific licenses, porting, etc. Our home page can be found at <http://www.freetype.org>

## 5.12. HarfBuzz

Name	Version	Comments / usage	Target device
HarfBuzz	1.4.8	support for OpenType font layouts	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Further information

HarfBuzz is licensed under the so-called "Old MIT" license. For parts of HarfBuzz that are licensed under different licenses see individual files names COPYING in subdirectories where applicable. `ucdn.h` and `ucdn.c` Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee



is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

### Copyright text

Copyright © 2010,2011,2012 Google, Inc.  
 Copyright © 2012 Mozilla Foundation  
 Copyright © 2011 Codethink Limited  
 Copyright © 2008,2010 Nokia Corporation and/or its subsidiary(-ies)  
 Copyright © 2009 Keith Stribley  
 Copyright © 2009 Martin Hosken and SIL International  
 Copyright © 2007 Chris Wilson  
 Copyright © 2006 Behdad Esfahbod  
 Copyright © 2005 David Turner  
 Copyright © 2004,2007,2008,2009,2010 Red Hat, Inc.  
 Copyright © 1998-2004 David Turner and Werner Lemberg  
 For full copyright notices consult the individual files in the package.  
 Copyright (C) 2012 Grigori Goronzy <greg@kinoho.net>  
 Copyright (C) 1994-2013 Free Software Foundation, Inc.  
 Copyright © 2015 Ebrahim Byagowi  
 Copyright © 2011 Martin Hosken  
 Copyright © 2011 SIL International  
 Copyright © 2006 Behdad Esfahbod

### License text

Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this software and its documentation for any purpose, provided that the above copyright notice and the following two paragraphs appear in all copies of this software.

IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF THE COPYRIGHT HOLDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THE COPYRIGHT HOLDER SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE



COPYRIGHT HOLDER HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

## 5.13. ICU4C

Name	Version	Comments / usage	Target device
ICU4C	60.2	Used to process bidirectional text with the algorithm defined in the Unicode Standard Annex #9	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Further information

**Third-Party Software Licenses** This section contains third-party software notices and/or additional terms for licensed third-party software components included within ICU libraries.

1. ICU License - ICU 1.8.1 to ICU 57.1  
COPYRIGHT AND PERMISSION NOTICE  
Copyright (c) 1995-2016 International Business Machines Corporation and others  
All rights reserved.  
Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION



OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder. All trademarks and registered trademarks mentioned herein are the property of their respective owners. 2. Chinese/Japanese Word Break Dictionary Data (cjdict.txt) # The Google Chrome software developed by Google is licensed under # the BSD license. Other software included in this distribution is # provided under other licenses, as set forth below. ## The BSD License # <http://opensource.org/licenses/bsd-license.php> # Copyright (C) 2006-2008, Google Inc. ## All rights reserved. ## Redistribution and use in source and binary forms, with or without # modification, are permitted provided that the following conditions are met: ## Redistributions of source code must retain the above copyright notice, # this list of conditions and the following disclaimer. # Redistributions in binary form must reproduce the above # copyright notice, this list of conditions and the following # disclaimer in the documentation and/or other materials provided with # the distribution. # Neither the name of Google Inc. nor the names of its # contributors may be used to endorse or promote products derived from # this software without specific prior written permission. ### THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND # CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, # INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF # MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE # DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE # LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR # CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF # SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR # BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF # LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING # NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS # SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ### The word list in cjdict.txt are generated by combining three word lists # listed below with further processing for compound word breaking. The # frequency is generated with an iterative training against Google web # corpora. ## \* Libtabe (Chinese) # - [https://sourceforge.net/project/?group\\_id=1519](https://sourceforge.net/project/?group_id=1519) # - Its license terms and conditions are shown below. ## \* IPADIC (Japanese) # - <http://chasen.aist-nara.ac.jp/chasen/distribution.html> # - Its license terms and conditions are shown below. ## -----COPYING.libtabe ---- BEGIN----- ## /\* # \* Copyright (c) 1999 TaBE Project. # \* Copyright (c) 1999 Pai-Hsiang Hsiao. # \* All rights reserved. # \* \* \* Redistribution and use in source and binary forms, with or without # \* modification, are permitted provided that the following conditions # \* are met: # \* \* \* . Redistributions of source code must retain the above copyright # \* notice, this list of conditions and the following disclaimer. # \* . Redistributions in binary form must reproduce the above copyright # \* notice, this list of conditions and the following disclaimer in # \* the documentation and/or other materials provided with the # \* distribution. # \* . Neither the name of the TaBE Project nor the names of its # \* contributors may be used to endorse or promote products derived # \* from this software without specific prior written permission. # \* \* \* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS # \* "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT # \* LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS # \* FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE # \* REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, # \* INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSE-



QUENTIAL DAMAGES # \* (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE  
 GOODS OR # \* SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) #  
 \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, # \* STRICT  
 LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) # \* ARISING IN ANY WAY OUT OF  
 THE USE OF THIS SOFTWARE, EVEN IF ADVISED # \* OF THE POSSIBILITY OF SUCH DAMAGE. # \*/ #  
 # / \* # \* Copyright (c) 1999 Computer Systems and Communication Lab, # \* Institute of Information Science,  
 Academia # \* Sinica. All rights reserved. # \* # \* Redistribution and use in source and binary forms, with or  
 without # \* modification, are permitted provided that the following conditions # \* are met: # \* # \* . Redistri-  
 butions of source code must retain the above copyright # \* notice, this list of conditions and the following  
 disclaimer. # \* . Redistributions in binary form must reproduce the above copyright # \* notice, this list of  
 conditions and the following disclaimer in # \* the documentation and/or other materials provided with the # \*  
 distribution. # \* . Neither the name of the Computer Systems and Communication Lab # \* nor the names of  
 its contributors may be used to endorse or # \* promote products derived from this software without specific  
 # \* prior written permission. # \* # \* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS  
 AND CONTRIBUTORS # \* "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT  
 NOT # \* LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS # \* FOR A  
 PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE # \* REGENTS OR CONTRIBU-  
 TORS BE LIABLE FOR ANY DIRECT, INDIRECT, # \* INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSE-  
 QUENTIAL DAMAGES # \* (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE  
 GOODS OR # \* SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) #  
 \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, # \* STRICT  
 LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) # \* ARISING IN ANY WAY OUT OF  
 THE USE OF THIS SOFTWARE, EVEN IF ADVISED # \* OF THE POSSIBILITY OF SUCH DAMAGE. # \*/  
 # # Copyright 1996 Chih-Hao Tsai @ Beckman Institute, # University of Illinois # c-tsai4@uiuc.edu http://  
 casper.beckman.uiuc.edu/~c-tsai4 # # -----COPYING.libtabe-----END----- # #  
 # # -----COPYING.ipadic-----BEGIN----- # # Copyright 2000, 2001, 2002, 2003  
 Nara Institute of Science # and Technology. All Rights Reserved. # # Use, reproduction, and distribution  
 of this software is permitted. # Any copy of this software, whether in its original form or modified, # must  
 include both the above copyright notice and the following # paragraphs. # # Nara Institute of Science and  
 Technology (NAIST), # the copyright holders, disclaims all warranties with regard to this # software, includ-  
 ing all implied warranties of merchantability and # fitness, in no event shall NAIST be liable for # any special,  
 indirect or consequential damages or any damages # whatsoever resulting from loss of use, data or profits,  
 whether in an # action of contract, negligence or other tortuous action, arising out # of or in connection with  
 the use or performance of this software. # # A large portion of the dictionary entries # originate from ICOT  
 Free Software. The following conditions for ICOT # Free Software applies to the current dictionary as well.  
 # # Each User may also freely distribute the Program, whether in its # original form or modified, to any third  
 party or parties, PROVIDED # that the provisions of Section 3 ("NO WARRANTY") will ALWAYS appear #  
 on, or be attached to, the Program, which is distributed substantially # in the same form as set out herein  
 and that such intended # distribution, if actually made, will neither violate or otherwise # contravene any  
 of the laws and regulations of the countries having # jurisdiction over the User or the intended distribution  
 itself. # # NO WARRANTY # # The program was produced on an experimental basis in the course of the  
 # research and development conducted during the project and is provided # to users as so produced on



an experimental basis. Accordingly, the # program is provided without any warranty whatsoever, whether express, # implied, statutory or otherwise. The term "warranty" used herein # includes, but is not limited to, any warranty of the quality, # performance, merchantability and fitness for a particular purpose of # the program and the nonexistence of any infringement or violation of # any right of any third party. ## Each user of the program will agree and understand, and be deemed to # have agreed and understood, that there is no warranty whatsoever for # the program and, accordingly, the entire risk arising from or # otherwise connected with the program is assumed by the user. ## Therefore, neither ICOT, the copyright holder, or any other # organization that participated in or was otherwise related to the # development of the program and their respective officials, directors, # officers and other employees shall be held liable for any and all # damages, including, without limitation, general, special, incidental # and consequential damages, arising out of or otherwise in connection # with the use or inability to use the program or any product, material # or result produced or otherwise obtained by using the program, # regardless of whether they have been advised of, or otherwise had # knowledge of, the possibility of such damages at any time during the # project or thereafter. Each user will be deemed to have agreed to the # foregoing by his or her commencement of use of the program. The term # "use" as used herein includes, but is not limited to, the use, # modification, copying and distribution of the program and the # production of secondary products from the program. ## In the case where the program, whether in its original form or # modified, was distributed or delivered to or received by a user from # any person, organization or entity other than ICOT, unless it makes or # grants independently of ICOT any specific warranty to the user in # writing, such person, organization or entity, will also be exempted # from and not be held liable to the user for any such damages as noted # above as far as the program is concerned. ## -----COPYING.ipadic-----END----- 3.

Lao Word Break Dictionary Data (laodict.txt) # Copyright (c) 2013 International Business Machines Corporation # and others. All Rights Reserved. ## Project: <http://code.google.com/p/lao-dictionary/> # Dictionary: <http://lao-dictionary.googlecode.com/git/Lao-Dictionary.txt> # License: <http://lao-dictionary.googlecode.com/git/Lao-Dictionary-LICENSE.txt> # (copied below) ----- Unicode Data Files include all data files under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, <http://www.unicode.org/cldr/data/>, <http://source.icu-project.org/repos/icu/>, and <http://www.unicode.org/utility/trac/browser/>. Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>. Software includes any source code published in the Unicode Standard or under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, <http://www.unicode.org/cldr/data/>, <http://source.icu-project.org/repos/icu/>, and <http://www.unicode.org/utility/trac/browser/>. NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.## This file is derived from the above dictionary, with slight # modifications. # ----- # Copyright (C) 2013 Brian Eugene Wilson, Robert Martin Campbell. # All rights reserved. ## Redistribution and use in source and binary forms, with or without # modification, # are permitted provided that the following conditions are met: ## # Redistributions of source code must retain the above copyright notice, this # list of conditions and the following disclaimer. Redistributions in # binary form must reproduce the above copyright notice, this list of # conditions and the following disclaimer in the documentation and/or # other mate-



rials provided with the distribution. # # # THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS # "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT # LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS # FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE # COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, # INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES # (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR # SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) # HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, # STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) # ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED # OF THE POSSIBILITY OF SUCH DAMAGE. # ----- 4. Burmese Word Break Dictionary Data (burmesedict.txt) # Copyright (c) 2014 International Business Machines Corporation # and others. All Rights Reserved. # # This list is part of a project hosted at: # [github.com/kanyawtech/myanmar-karen-word-lists](https://github.com/kanyawtech/myanmar-karen-word-lists) # # ----- # Copyright (c) 2013, LeRoy Benjamin Sharon # All rights reserved. # # Redistribution and use in source and binary forms, with or without # modification, are permitted provided that the following conditions # are met: Redistributions of source code must retain the above # copyright notice, this list of conditions and the following # disclaimer. Redistributions in binary form must reproduce the # above copyright notice, this list of conditions and the following # disclaimer in the documentation and/or other materials provided # with the distribution. # # Neither the name Myanmar Karen Word Lists, nor the names of its # contributors may be used to endorse or promote products derived # from this software without specific prior written permission. # # THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND # CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, # INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF # MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE # DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS # BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, # EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED # TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, # DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON # ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR # TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF # THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF # SUCH DAMAGE. # ----- 5. Time Zone Database ICU uses the public domain data and code derived from Time Zone Database for its time zone support. The ownership of the TZ database is explained in BCP 175: Procedure for Maintaining the Time Zone Database section 7. # 7. Database Ownership # # The TZ database itself is not an IETF Contribution or an IETF # document. Rather it is a pre-existing and regularly updated work # that is in the public domain, and is intended to remain in the # public domain. Therefore, BCPs 78 [RFC5378] and 79 [RFC3979] do # not apply to the TZ Database or contributions that individuals make # to it. Should any claims be made and substantiated against the TZ # Database, the organization that is providing the IANA # Considerations defined in this RFC, under the memorandum of # understanding with the IETF, currently ICANN, may act in accordance # with all competent court orders. No ownership claims will be made # by ICANN or the IETF Trust on the database or the code. Any person # making a contribution to the database or code waives all rights to # future claims in that contribution or in the TZ Database.

### Copyright text

Copyright (c) 2016 and later: Unicode, Inc. and others. License & terms  
of use: <http://www.unicode.org/copyright.html>

Copyright (c) 1991-2018 Unicode, Inc. All rights reserved.

Copyright (c) 1997-2016 International Business Machines Corporation and  
others. All Rights Reserved.

### License text

COPYRIGHT AND PERMISSION NOTICE (ICU 58 and later)

Copyright (c) 1991-2017 Unicode, Inc. All rights reserved.

Distributed under the Terms of Use in

<http://www.unicode.org/copyright.html>

Permission is hereby granted, free of charge, to any person obtaining  
a copy of the Unicode data files and any associated documentation  
(the "Data Files") or Unicode software and any associated documentation  
(the "Software") to deal in the Data Files or Software  
without restriction, including without limitation the rights to use,  
copy, modify, merge, publish, distribute, and/or sell copies of  
the Data Files or Software, and to permit persons to whom the Data Files  
or Software are furnished to do so, provided that either  
(a) this copyright and permission notice appear with all copies  
of the Data Files or Software, or  
(b) this copyright and permission notice appear in associated  
Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF  
ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE  
WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND  
NONINFRINGEMENT OF THIRD PARTY RIGHTS.

IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS  
NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL  
DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE,  
DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER  
TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR  
PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder  
shall not be used in advertising or otherwise to promote the sale,  
use or other dealings in these Data Files or Software without prior  
written authorization of the copyright holder.



## 5.14. Json.NET

Name	Version	Comments / usage	Target device
Json.NET	9.0.1	Serializing and deserializing of JSON data structures / files	

### Copyright text

Copyright (c) 2007 James Newton-King

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.15. LanguageExt.Core

Name	Version	Comments / usage	Target device
Language-Ext.Core	3.1.14	Programming support library	

### Copyright text

Copyright (c) 2014-2019 Paul Louth

### License text

Permission is hereby granted, free of charge, to any person obtaining a

copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.16. libjpeg-turbo

Name	Version	Comments / usage	Target device
libjpeg-turbo	1.5.3	Reading of jpg images	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Further information

This software is based in part on the work of the Independent JPEG Group. libjpeg-turbo is covered by three compatible BSD-style open source licenses: - The IJG (Independent JPEG Group) License, which





is listed in [README.ijs](README.ijs) This license applies to the libjpeg API library and associated programs (any code inherited from libjpeg, and any modifications to that code.) - The Modified (3-clause) BSD License, which is listed in [turbojpeg.c](turbojpeg.c) This license covers the TurboJPEG API library and associated programs. - The zlib License, which is listed in [simd/jsimdx.inc](simd/jsimdx.inc) This license is a subset of the other two, and it covers the libjpeg-turbo SIMD extensions.

### Copyright text

libjpeg API library and associated programs:

This software is copyright (C) 1991-2016, Thomas G. Lane, Guido Vollbeding. All Rights Reserved except as specified below.

TurboJPEG API library and associated programs:

Copyright (C)2009-2016 D. R. Commander. All Rights Reserved.

libjpeg-turbo SIMD extensions:

jsimdx.inc - common declarations

Copyright 2009 Pierre Ossman <ossman@cendio.se> for Cendio AB

Copyright (C) 2010, D. R. Commander.

Based on the x86 SIMD extension for IJG JPEG library - version 1.02

Copyright (C) 1999-2006, MIYASAKA Masaru.

The following file is included: jsimd\_arm.c

Copyright 2009 Pierre Ossman <ossman@cendio.se> for Cendio AB

Copyright (C) 2011, Nokia Corporation and/or its subsidiary(-ies).

Copyright (C) 2009-2011, 2013-2014, 2016, D. R. Commander.

Copyright (C) 2015-2016, Matthieu Darbois.

Based on the x86 SIMD extension for IJG JPEG library, Copyright (C) 1999-2006, MIYASAKA Masaru.

The following file is included: jsimd\_arm64\_neon.S

Copyright (C) 2009-2011, Nokia Corporation and/or its subsidiary(-ies).

All Rights Reserved. Author: Siarhei Siamashka

<siarhei.siamashka@nokia.com>

Copyright (C) 2013-2014, Linaro Limited. All Rights Reserved. Author:

Ragesh Radhakrishnan <ragesh.r@linaro.org>

Copyright (C) 2014-2016, D. R. Commander. All Rights Reserved.

Copyright (C) 2015-2016, Matthieu Darbois. All Rights Reserved.

Copyright (C) 2016, Siarhei Siamashka. All Rights Reserved.

The following file is included: jsimd\_none.c

Copyright 2009 Pierre Ossman <ossman@cendio.se> for Cendio AB

Copyright (C) 2009-2011, 2014, D. R. Commander.

Copyright (C) 2015, Matthieu Darbois.  
Based on the x86 SIMD extension for IJG JPEG library, Copyright (C)  
1999-2006, MIYASAKA Masaru.

The following file is included: turbojpeg.c  
Copyright (C)2009-2017 D. R. Commander. All Rights Reserved.

### License text

libjpeg API library and associated programs:

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

- (1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
- (2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
- (3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

TurboJPEG API library and associated programs:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the libjpeg-turbo Project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS", AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR

PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

libjpeg-turbo SIMD extensions:

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

## 5.17. libpng

Name	Version	Comments / usage	Target device
libpng	1.6.35	PNG decoding	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

## Copyright text

libpng versions 1.0.7, July 1, 2000 through 1.6.35, July 15, 2018 are Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson, are derived from libpng-1.0.6, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors:

Simon-Pierre Cadieux  
Eric S. Raymond  
Mans Rullgard  
Cosmin Truta  
Gilles Vollant  
James Yu  
Mandar Sahastrabuddhe  
Google Inc.  
Vadim Barkov

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

Some files in the "contrib" directory and some configure-generated files that are distributed with libpng have other copyright owners and are released under other open source licenses.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998-2000 Glenn Randers-Pehrson, are derived from libpng-0.96, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane  
Glenn Randers-Pehrson  
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996-1997 Andreas Dilger, are derived from libpng-0.88,



and are distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler  
Kevin Bracey  
Sam Bushell  
Magnus Holmgren  
Greg Roelofs  
Tom Tanner

Some files in the "scripts" directory have other copyright owners but are released under this license.

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger  
Dave Martindale  
Guy Eric Schalnat  
Paul Schmidt  
Tim Wegner

### License text

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not

be misrepresented as being the original source.

3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

## 5.18. Microsoft Blend for Visual Studio SDK for .NET 4.5

Name	Version	Comments / usage	Target device
Microsoft Blend for Visual Studio SDK for .NET 4.5	4.5		

### Copyright text

Copyright (c) Microsoft Corporation. All rights reserved.

### License text

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT VISUAL STUDIO PROFESSIONAL 2012 AND TRIAL EDITION

[...]

4. DISTRIBUTABLE CODE. The software contains code that you are permitted to distribute

in programs you develop if you comply with the terms below.

a. Right to Use and Distribute. The code and text files listed below are “Distributable Code.”

- REDIST.TXT Files. You may copy and distribute the object code form of code listed on the REDIST

list located at [go.microsoft.com/fwlink/?LinkId=247624](http://go.microsoft.com/fwlink/?LinkId=247624).

- Sample Code. You may modify, copy, and distribute the source and object code form of code marked as “sample.”

- Icons. You may copy and distribute the icons in the Image Library as

described in the software documentation.

- Image Library. You may copy and distribute images and animations in the Image Library as described in the software documentation. You may also modify that content. If you modify the content, it must be for use that is consistent with the permitted use of the unmodified content.
  - Blend Site Templates for Visual Studio 2012. The software contains code marked as "site templates" that you are permitted to use along with your content. You may copy, modify, deploy and distribute the source and object code form of these site templates.
  - Blend Fonts for Visual Studio 2012. You may distribute unmodified copies of the Buxton Sketch font, SketchFlow Print font and SegoeMarker font.
  - Blend Styles for Visual Studio 2012. You may copy, modify and distribute the object code form of code identified as "Sketch" or "Simple" Styles.
  - Silverlight 5 SDK Libraries. You may copy and distribute the object code form of code marked as "Silverlight Libraries", "Client Libraries" and "Server Libraries."
  - ASP.NET MVC and Web Tooling Extensions.js Files. You may modify, copy and distribute or deploy any .js files contained in the ASP.NET Model View Controller or in the Web Tooling Extensions as part of your ASP.NET programs.
  - Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.
- b. Distribution Requirements. For any Distributable Code you distribute, you must:
- add significant primary functionality to it in your programs;
  - for any Distributable Code having a filename extension of .lib, distribute only the results of running such Distributable Code through a linker with your program;
  - distribute Distributable Code included in a setup program only as part of that setup program without modification;
  - require distributors and external end users to agree to terms that protect it at least as much as this agreement;



- display your valid copyright notice on your programs;
- and indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.

c. Distribution Restrictions. You may not:

- alter any copyright, trademark or patent notice in the Distributable Code;
  - use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
  - distribute Distributable Code to run on a platform
  - include Distributable Code in malicious, deceptive or unlawful programs;
- or
- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
  - the code be disclosed or distributed in source code form; or
  - others have the right to modify it.

d. Windows Library for JavaScript. The software includes the Windows Library for JavaScript.

In addition to the other provisions of this section, "Distributable Code", the following also

applies to your programs that work in conjunction with the Windows Library for JavaScript.

The Windows Library for JavaScript files help your programs implement the Windows design

template and UI look and feel. You may copy and use these files, without modification,

in your programs that you develop for your internal use or in programs that you develop and

distribute to third parties. Distribution of your programs containing the Windows Library for

JavaScript files is limited solely to the Windows Store. You understand and agree such

distribution of your programs is subject to the Windows Store developer terms and

terms of use.



## 5.19. MSFT ParallelExtensionsExtra

Name	Version	Comments / usage	Target device
MSFT ParallelExtensionsExtra	1.2.0	Parallel programming in .NET	

### Copyright text

Please refer to open source project:

[https://code.msdn.microsoft.com/ParExtSamples/Release/ProjectReleases.aspx  
ReleaseId=4179](https://code.msdn.microsoft.com/ParExtSamples/Release/ProjectReleases.aspx?ReleaseId=4179)

### License text

MICROSOFT LIMITED PUBLIC LICENSE version 1.1

This license governs use of code marked as “sample” or “example” available on this web site without a license agreement, as provided under the section above titled “NOTICE SPECIFIC TO SOFTWARE AVAILABLE ON THIS WEB SITE.” If you use such code (the “software”), you accept this license. If you do not accept the license, do not use the software.

#### 1. Definitions

The terms “reproduce,” “reproduction,” “derivative works,” and “distribution” have the same meaning here as under U.S. copyright law.

A “contribution” is the original software, or any additions or changes to the software.

A “contributor” is any person that distributes its contribution under this license.

“Licensed patents” are a contributor’s patent claims that read directly on its contribution.

#### 2. Grant of Rights

(A) Copyright Grant - Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution,



and distribute its contribution or any derivative works that you create.

(B) Patent Grant - Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

### 3. Conditions and Limitations

(A) No Trademark License- This license does not grant you rights to use any contributors' name, logo, or trademarks.

(B) If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.

(C) If you distribute any portion of the software, you must retain all copyright, patent, trademark, and attribution notices that are present in the software.

(D) If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.

(E) The software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

(F) Platform Limitation - The licenses granted in sections 2(A) and 2(B) extend only to the software or derivative works that you create that run directly on a Microsoft Windows operating system product, Microsoft run-time technology (such as the .NET Framework or Silverlight), or Microsoft application platform (such as Microsoft Office or Microsoft Dynamics).

## 5.20. Nothings stb\_easy\_font

Name	Version	Comments / usage	Target device
Nothings stb_easy_font	1.0 (03.03.2017)	Bitmap font handling for 3D rendering	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Copyright text

Copyright (c) 2017 Sean Barrett

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:  
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,

FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.21. Nothings stb\_image

Name	Version	Comments / usage	Target device
Nothings stb_image	2.21	Image loading	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Copyright text

Copyright (c) 2017 Sean Barrett

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to

use, copy, modify, merge, publish, distribute, sublicense, and/or sell  
copies  
of the Software, and to permit persons to whom the Software is furnished  
to do  
so, subject to the following conditions:  
The above copyright notice and this permission notice shall be included in  
all  
copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL  
THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING  
FROM,  
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN  
THE  
SOFTWARE.

## 5.22. Prism

Name	Version	Comments / usage	Target device
Prism	6.2	WPF programming	

### Copyright text

Copyright (c) Microsoft Corporation. All rights reserved  
(C) Copyright .NET Foundation

### License text

Apache License Version 2.0, January 2004  
<http://www.apache.org/licenses/>  
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION  
1. Definitions.  
"License" shall mean the terms and conditions for use, reproduction, and  
distribution as defined  
by Sections 1 through 9 of this document.  
"Licensor" shall mean the copyright owner or entity authorized by the  
copyright owner that is  
granting the License.  
"Legal Entity" shall mean the union of the acting entity and all other



entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition,

"control" means

(i) the power, direct or indirect, to cause the direction or management

of such entity, whether by contract or otherwise, or

(ii) ownership of fifty percent (50%) or more of the outstanding shares, or

(iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited

to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a

Source form, including but not limited to compiled object code, generated documentation,

and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under

the License, as indicated by a copyright notice that is included in or attached to the work

(an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on

(or derived from) the Work and for which the editorial revisions, annotations, elaborations,

or other modifications represent, as a whole, an original work of authorship. For the purposes of

this License, Derivative Works shall not include works that remain separable from, or merely

link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work

and any modifications or additions to that Work or Derivative Works thereof, that is intentionally

submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal



Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as

"Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each

Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge,

royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of,

publicly display, publicly perform, sublicense, and distribute the Work and such Derivative

Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor

hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable

(except as stated in this section) patent license to make, have made, use, offer to sell, sell,

import, and otherwise transfer the Work, where such license applies only to those patent claims

licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or

by combination of their Contribution(s) with the Work to which such Contribution(s)

was submitted. If You institute patent litigation against any entity (including a

cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution



incorporated within the Work constitutes direct or contributory patent infringement,

then any patent licenses granted to You under this License for that Work shall terminate

as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works

thereof in any medium, with or without modifications, and in Source or Object form, provided

that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License;

and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all

copyright, patent, trademark, and attribution notices from the Source form of the Work,

excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative

Works that You distribute must include a readable copy of the attribution notices contained

within such NOTICE file, excluding those notices that do not pertain to any part of the

Derivative Works, in at least one of the following places: within a NOTICE text file

distributed as part of the Derivative Works; within the Source form or documentation,

if provided along with the Derivative Works; or, within a display generated by the

Derivative Works, if and wherever such third-party notices normally appear.

The contents of the NOTICE file are for informational purposes only and do

not modify the License. You may add Your own attribution notices within Derivative

Works that You distribute, alongside or as an addendum to the NOTICE text from the Work,



provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution

intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor

provides the Work (and each Contributor provides its Contributions) on an

"AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE.

You are solely responsible for determining the appropriateness of using or

redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## 5.23. RapidJSON

Name	Version	Comments / usage	Target device
RapidJSON	1.1.0	JSON parser for C++	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Further information

Other dependencies and licenses: The msinttypes r29 Copyright (c) 2006-2013 Alexander Chemeris All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. \* Neither the name of copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS AND CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. \*Not\* used by Elektrobit Automotive GmbH: json.-org Copyright (c) 2002 JSON.org All Rights Reserved. JSON\_checker Copyright (c) 2002 JSON.org All Rights Reserved. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. The Software shall be used for Good, not Evil. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

### Copyright text

Copyright (C) 2015 THL A29 Limited, a Tencent company, and Milo Yip. All rights reserved.

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.24. stlport on Android

Name	Version	Comments / usage	Target device
stlport on Android	5.2.1	Standard lib port on Android	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the in-



formation provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

#### Further information

The Licensor of STLport (<http://www.stlport.org/doc/license.html>) provides the following notice: The Licensee may distribute binaries compiled with STLport (whether original or modified) without any royalties or restrictions. The Licensee may distribute original or modified STLport sources, provided that: - The conditions indicated in the above permission (license terms) notice are met; - The following copyright notices are retained when present, and conditions provided in accompanying permission notices are met : Copyright 1994 Hewlett-Packard Company Copyright 1996,97 Silicon Graphics Computer Systems, Inc. Copyright 1997 Moscow Center for SPARC Technology. Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Moscow Center for SPARC Technology makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

#### Copyright text

Copyright 1999,2000 Boris Fomitchev

#### License text

Boris Fomitchev grants Licensee a non-exclusive, non-transferable, royalty-free license to use STLport and its documentation without fee.  
By downloading, using, or copying STLport or any portion thereof, Licensee agrees to abide by the intellectual property laws and all other applicable laws of the United States of America, and to all of the terms and conditions of this Agreement.  
Licensee shall maintain the following copyright and permission notices on STLport sources and its documentation unchanged: Copyright 1999,2000 Boris Fomitchev  
This material is provided "as is", with absolutely no warranty expressed or implied. Any use is at your own risk.

Permission to use or copy this software for any purpose is hereby granted without fee, provided the above notices are retained on all copies. Permission to modify the code and to distribute modified code is granted, provided the above notices are retained, and a notice that the code was modified is included with the above copyright notice. The Licensee may distribute binaries compiled with STLport (whether original or modified) without any royalties or restrictions.

## 5.25. System.Collections.Immutable

Name	Version	Comments / usage	Target device
System.Collections.Immutable	1.1.37	Utility functions in EB GUIDE Studio	

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Copyright text

© Microsoft Corporation. All rights reserved.

### License text

MICROSOFT SOFTWARE LICENSE TERMS  
MICROSOFT .NET LIBRARY

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them.



They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE. IF YOU COMPLY WITH THESE LICENSE TERMS, YOU HAVE THE PERPETUAL RIGHTS BELOW.

1. INSTALLATION AND USE RIGHTS.

- a. Installation and Use. You may install and use any number of copies of the software to design, develop and test your programs.
- b. Third Party Programs. The software may include third party programs that Microsoft, not the third party, licenses to you under this agreement. Notices, if any, for the third party program are included for your information only.

2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

- a. DISTRIBUTABLE CODE. The software is comprised of Distributable Code. "Distributable Code" is code that you are permitted to distribute in programs you develop if you comply with the terms below.

- i. Right to Use and Distribute.

- You may copy and distribute the object code form of the software.
- Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.

- ii. Distribution Requirements. For any Distributable Code you distribute, you must

- add significant primary functionality to it in your programs;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.

- iii. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;



- include Distributable Code in malicious, deceptive or unlawful programs; or
- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that - the code be disclosed or distributed in source code form; - or others have the right to modify it.

3. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- work around any technical limitations in the software;
- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- publish the software for others to copy;
- rent, lease or lend the software;
- transfer the software or this agreement to any third party; or
- use the software for commercial software hosting services.

4. BACKUP COPY. You may make one backup copy of the software. You may use it only to reinstall the software.

5. DOCUMENTATION. Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.

6. EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

7. SUPPORT SERVICES. Because this software is “as is,” we may not provide support services for it.

8. ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

9. APPLICABLE LAW.

a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition





laws, and in tort.

b. Outside the United States. If you acquired the software in any other country, the laws of that country apply.

10. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

11. DISCLAIMER OF WARRANTY. THE SOFTWARE IS LICENSED "AS-IS." YOU BEAR THE RISK OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS OR STATUTORY GUARANTEES UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

FOR AUSTRALIA – YOU HAVE STATUTORY GUARANTEES UNDER THE AUSTRALIAN CONSUMER LAW AND NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS.

12. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

EXONÉRATION DE GARANTIE. Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est à votre seule risque et péril. Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité

marchande, d'adéquation à un usage particulier et d'absence de contrefaçon sont exclues.

**LIMITATION DES DOMMAGES-INTÉRÊTS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES.** Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement à hauteur de 5,00 \$ US. Vous ne pouvez prétendre à aucune indemnisation pour les autres dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices.

Cette limitation concerne :

- tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et
- les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur.

Elle s'applique également, même si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera pas à votre égard.

**EFFET JURIDIQUE.** Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous confèrent les lois de votre pays si celles-ci ne le permettent pas.

## 5.26. System.Reactive

Name	Version	Comments / usage	Target device
System.Reactive	4.1.2	Programming support library	

### Copyright text

Copyright (c) .NET Foundation and Contributors  
All Rights Reserved

### License text

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

## 5.27. System.Threading.Tasks.Extensions

Name	Version	Comments / usage	Target device
System.Threading.Tasks.Extensions	4.5.1	Programming support library	

### Further information

Content of THIRD-PARTY-NOTICES.TXT (part of the original download package): .NET Core uses third-party libraries or other resources that may be distributed under licenses different than the .NET Core software. In the event that we accidentally failed to list a required notice, please bring it to our attention. Post an issue or email us: [dotnet@microsoft.com](mailto:dotnet@microsoft.com) The attached notices are provided for information only. License notice for Slicing-by-8 ----- <http://sourceforge.net/projects/slicing-by-8/> Copyright (c) 2004-2006 Intel Corporation - All Rights Reserved This software program is licensed subject to the BSD License, available at <http://www.opensource.org/licenses/bsd-license.html>. License notice for Unicode data ----- <http://www.unicode.org/copyright.html#License> Copyright © 1991-2017 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>. Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either (a) this copyright and permission notice appear with all copies of the Data Files or Software, or (b) this copyright and permission notice appear in associated Documentation. THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE. Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these



Data Files or Software without prior written authorization of the copyright holder. License notice for Zlib ----- <https://github.com/madler/zlib> [http://zlib.net/zlib\\_license.html](http://zlib.net/zlib_license.html) /\* zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.11, January 15th, 2017 Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions: 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 3. This notice may not be removed or altered from any source distribution. Jean-loup Gailly Mark Adler jloup@gzip.org madler@alumni.caltech.edu \*/ License notice for Mono ----- <http://www.mono-project.com/docs/about-mono/> Copyright (c) .NET Foundation Contributors MIT License Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the Software), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. License notice for International Organization for Standardization ----- Portions (C) International Organization for Standardization 1986: Permission to copy in any form is granted for use with conforming SGML systems and applications as defined in ISO 8879, provided this notice is included in all copies. License notice for Intel ----- "Copyright (c) 2004-2006 Intel Corporation - All Rights Reserved Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.



License notice for Xamarin and Novell ----- Copyright (c) 2015 Xamarin, Inc (<http://www.xamarin.com>) Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. Copyright (c) 2011 Novell, Inc (<http://www.novell.com>) Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. Third party notice for W3C ----- "W3C SOFTWARE AND DOCUMENT NOTICE AND LICENSE Status: This license takes effect 13 May, 2015. This work is being provided by the copyright holders under the following license. License By obtaining and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions. Permission to copy, modify, and distribute this work, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the work or portions thereof, including modifications: The full text of this NOTICE in a location viewable to users of the redistributed or derivative work. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software and Document Short Notice should be included. Notice of any changes or modifications, through a copyright statement on the new code or document such as "This software or document includes material copied from or derived from [title and URI of the W3C document]. Copyright © [YEAR] W3C® (MIT, ERCIM, Keio, Beihang)." Disclaimers THIS WORK IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENT WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENT. The name and trademarks of copyright holders may



NOT be used in advertising or publicity pertaining to the work without specific, written prior permission. Title to copyright in this work will at all times remain with copyright holders." License notice for Bit Twiddling Hacks ----- Bit Twiddling Hacks By Sean Eron Anderson seander@cs.stanford.edu Individually, the code snippets here are in the public domain (unless otherwise noted) — feel free to use them however you please. The aggregate collection and descriptions are © 1997-2005 Sean Eron Anderson. The code and descriptions are distributed in the hope that they will be useful, but WITHOUT ANY WARRANTY and without even the implied warranty of merchantability or fitness for a particular purpose. License notice for Brotli ----- Copyright (c) 2009, 2010, 2013-2016 by the Brotli Authors. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. compress\_fragment.c: Copyright (c) 2011, Google Inc. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. \* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. decode\_fuzzer.c: Copyright (c) 2015 The Chromium Authors. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. \* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without





specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE."

### Copyright text

Copyright (c) .NET Foundation and Contributors  
All Rights Reserved

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.



## 5.28. System.ValueTuple

Name	Version	Comments / usage	Target device
System.ValueTuple	4.5.0	Programming support library	

### Further information

Content of THIRD-PARTY-NOTICES.TXT (part of the original download package): .NET Core uses third-party libraries or other resources that may be distributed under licenses different than the .NET Core software. In the event that we accidentally failed to list a required notice, please bring it to our attention. Post an issue or email us: [dotnet@microsoft.com](mailto:dotnet@microsoft.com) The attached notices are provided for information only. License notice for Slicing-by-8 ----- <http://sourceforge.net/projects/slicing-by-8/> Copyright (c) 2004-2006 Intel Corporation - All Rights Reserved This software program is licensed subject to the BSD License, available at <http://www.opensource.org/licenses/bsd-license.html>. License notice for Unicode data ----- <http://www.unicode.org/copyright.html#License> Copyright © 1991-2017 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>. Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either (a) this copyright and permission notice appear with all copies of the Data Files or Software, or (b) this copyright and permission notice appear in associated Documentation. THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE. Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder. License notice for Zlib ----- <https://github.com/madler/zlib> [http://zlib.net/zlib\\_license.html](http://zlib.net/zlib_license.html) /\* zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.11, January 15th, 2017 Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions: 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original





software. 3. This notice may not be removed or altered from any source distribution. Jean-loup Gailly Mark Adler [jloup@gzip.org](mailto:jloup@gzip.org) [madler@alumni.caltech.edu](mailto:madler@alumni.caltech.edu) \*/ License notice for Mono ----- <http://www.mono-project.com/docs/about-mono/> Copyright (c) .NET Foundation Contributors MIT License Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the Software), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. License notice for International Organization for Standardization ----- Portions (C) International Organization for Standardization 1986: Permission to copy in any form is granted for use with conforming SGML systems and applications as defined in ISO 8879, provided this notice is included in all copies. License notice for Intel ----- "Copyright (c) 2004-2006 Intel Corporation - All Rights Reserved Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. License notice for Xamarin and Novell ----- Copyright (c) 2015 Xamarin, Inc (<http://www.xamarin.com>) Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES



OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. Copyright (c) 2011 Novell, Inc (<http://www.novell.com>) Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. Third party notice for W3C ----- "W3C SOFTWARE AND DOCUMENT NOTICE AND LICENSE Status: This license takes effect 13 May, 2015. This work is being provided by the copyright holders under the following license. License By obtaining and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions. Permission to copy, modify, and distribute this work, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the work or portions thereof, including modifications: The full text of this NOTICE in a location viewable to users of the redistributed or derivative work. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software and Document Short Notice should be included. Notice of any changes or modifications, through a copyright statement on the new code or document such as "This software or document includes material copied from or derived from [title and URI of the W3C document]. Copyright © [YEAR] W3C® (MIT, ERCIM, Keio, Beihang)." Disclaimers THIS WORK IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENT WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENT. The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the work without specific, written prior permission. Title to copyright in this work will at all times remain with copyright holders." License notice for Bit Twiddling Hacks ----- Bit Twiddling Hacks By Sean Eron Anderson [seander@cs.stanford.edu](mailto:seander@cs.stanford.edu) Individually, the code snippets here are in the public domain (unless otherwise noted) — feel free to use them however you please. The aggregate collection and descriptions are © 1997-2005 Sean Eron Anderson. The code and descriptions are distributed in the hope that they will be useful, but WITHOUT ANY WARRANTY and without even the implied warranty of merchantability or fitness for a particular purpose. License notice for Brotli ----- Copyright (c) 2009, 2010, 2013-2016 by the Brotli Authors. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including



without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. compress\_fragment.c: Copyright (c) 2011, Google Inc. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. \* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. decode\_fuzzer.c: Copyright (c) 2015 The Chromium Authors. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. \* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE."

### Copyright text

Copyright (c) .NET Foundation and Contributors  
All Rights Reserved

### License text

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.29. The Impossibly Fast C++ Delegates

Name	Version	Comments / usage	Target device
The Impossibly Fast C++ Delegates	17.07.2005	C++ delegates	x

### **Obligation to customer**

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### **Copyright text**

Copyright 2005 by Sergey Ryazanov (<http://home.onego.ru/~ryazanov>)

### **License text**

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 5.30. TrueType font PT Sans Narrow

Name	Version	Comments / usage	Target device
TrueType font PT Sans Narrow	2.003	As example TTF font in the demo projects and as default font for new projects in EB GUIDE Studio	

### Copyright text

Copyright © 2009 ParaType Ltd. with Reserved Names "PT Sans" and "ParaType".

### License text

Paratype PT Sans Free Font License

Copyright © 2009 ParaType Ltd.

with Reserved Names "PT Sans" and "ParaType".

FONT LICENSE

PERMISSION & CONDITIONS

Permission is hereby granted, free of charge, to any person obtaining a copy of the font software,

to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies

of the font software, subject to the following conditions:

1) Neither the font software nor any of its individual components, in original or modified

versions, may be sold by itself.

2) Original or modified versions of the font software may be bundled, redistributed and/or

sold with any software, provided that each copy contains the above copyright notice and

this license. These can be included either as stand-alone text files, human-readable

headers or in the appropriate machine-readable metadata fields within text or binary

files as long as those fields can be easily viewed by the user.

3) No modified version of the font software may use the Reserved Name(s) or combinations of

Reserved Names with other words unless explicit written permission is granted by the ParaType.

This restriction only applies to the primary font name as presented to the users.

4) The name of ParaType or the author(s) of the font software shall not be used to promote,

endorse or advertise any modified version, except to acknowledge the contribution(s) of

ParaType and the author(s) or with explicit written permission of ParaType.

5) The font software, modified or unmodified, in part or in whole, must be distributed entirely

under this license, and must not be distributed under any other license. The requirement for

fonts to remain under this license does not apply to any document created using the

Font Software.

#### TERMINATION & TERRITORY

This license has no limits on time and territory, but it becomes null and void if any of the above conditions are not met.

#### DISCLAIMER

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK,

OR OTHER RIGHT. IN NO EVENT SHALL PARATYPE BE LIABLE FOR ANY CLAIM, DAMAGES

OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR

CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE,

ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

ParaType Ltd

<http://www.paratype.ru>

## 5.31. TrueType font PT Sans Narrow

Name	Version	Comments / usage	Target device
TrueType font PT Sans Narrow	2.003	As example TTF font in the demo projects and as default font for new projects used by EB GUIDE GTF on the target device	x

### **Obligation to customer**

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### **Copyright text**

Copyright (c) 2009 ParaType Ltd. with Reserved Names "PT Sans" and "ParaType".

### **License text**

Paratype PT Sans Free Font License

Copyright © 2009 ParaType Ltd.

with Reserved Names "PT Sans" and "ParaType".

FONT LICENSE

PERMISSION & CONDITIONS

Permission is hereby granted, free of charge, to any person obtaining a copy of the font software,

to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies

of the font software, subject to the following conditions:

1) Neither the font software nor any of its individual components, in original or modified

versions, may be sold by itself.

2) Original or modified versions of the font software may be bundled, redistributed and/or

sold with any software, provided that each copy contains the above copyright notice and

this license. These can be included either as stand-alone text files, human-readable

headers or in the appropriate machine-readable metadata fields within text or binary





files as long as those fields can be easily viewed by the user.

3) No modified version of the font software may use the Reserved Name(s) or combinations of

Reserved Names with other words unless explicit written permission is granted by the ParaType.

This restriction only applies to the primary font name as presented to the users.

4) The name of ParaType or the author(s) of the font software shall not be used to promote,

endorse or advertise any modified version, except to acknowledge the contribution(s) of

ParaType and the author(s) or with explicit written permission of ParaType.

5) The font software, modified or unmodified, in part or in whole, must be distributed entirely

under this license, and must not be distributed under any other license. The requirement for

fonts to remain under this license does not apply to any document created using the

Font Software.

#### TERMINATION & TERRITORY

This license has no limits on time and territory, but it becomes null and void if any of the

above conditions are not met.

#### DISCLAIMER

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR

IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK,

OR OTHER RIGHT. IN NO EVENT SHALL PARATYPE BE LIABLE FOR ANY CLAIM, DAMAGES

OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR

CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT,

TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM

OTHER DEALINGS IN THE FONT SOFTWARE.

ParaType Ltd

<http://www.paratype.ru>

## 5.32. Windows 7 API Code Pack - Shell

Name	Version	Comments / usage	Target device
Windows 7 API Code Pack - Shell	1.1.0	Used for directory browsing in EB GUIDE Studio	

### Copyright text

Copyright (c) Microsoft Corporation. All rights reserved.

### License text

MICROSOFT SOFTWARE LICENSE TERMS  
MICROSOFT WINDOWS API CODE PACK FOR MICROSOFT .NET FRAMEWORK

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE.

If you comply with these license terms, you have the rights below.

#### 1. INSTALLATION AND USE RIGHTS.

- You may use any number of copies of the software to design, develop and test your programs that run on a Microsoft Windows operating system.
- This agreement gives you rights to the software only. Any rights to a Microsoft Windows operating system (such as testing pre-release versions of Windows in a live operating environment) are provided separately by the license terms for Windows.

#### 2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

- a. Distributable Code. You may modify, copy, and distribute the software, in source or compiled form, to run on a Microsoft Windows operating system.
- ii. Distribution Requirements. If you distribute the software, you must



- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- if you modify the software and distribute such modified files, include prominent notices in such modified files so that recipients know that they are not receiving the original software;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs or to your modifications to the software.

iii. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the software;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- include the software in malicious, deceptive or unlawful programs; or
- modify or distribute the source code of the software so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
- the code be disclosed or distributed in source code form; or
- others have the right to modify it.

3. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement.

4. EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see <<http://www.microsoft.com/exporting>>.

5. SUPPORT SERVICES. Because this software is "as is," we may not provide support services for it.

6. ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

7. APPLICABLE LAW.

a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. Outside the United States. If you acquired the software in any other



country, the laws of that country apply.

8. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

9. DISCLAIMER OF WARRANTY. THE SOFTWARE IS LICENSED “AS-IS.” YOU BEAR THE RISK OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

10. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

EXONÉRATION DE GARANTIE. Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est à votre seule risque et péril. Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité marchande, d'adéquation à un usage particulier et d'absence de contrefaçon sont exclues.

LIMITATION DES DOMMAGES-INTÉRÊTS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES. Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement à hauteur de 5,00 \$ US. Vous ne pouvez prétendre à aucune indemnisation pour les autres

dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices.

Cette limitation concerne :

- tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et
- les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur.

Elle s'applique également, même si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera pas à votre égard.

EFFET JURIDIQUE. Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous confèrent les lois de votre pays si celles-ci ne le permettent pas.

## 5.33. Windows 7 API Code Pack - Core

Name	Version	Comments / usage	Target device
Windows 7 API Code Pack - Core	1.1.0.0	Used for directory browsing in EB GUIDE Studio	

### Copyright text

Copyright (c) Microsoft Corporation. All rights reserved.

### License text

MICROSOFT SOFTWARE LICENSE TERMS  
MICROSOFT WINDOWS API CODE PACK FOR MICROSOFT .NET FRAMEWORK

---

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and



- support services

for this software, unless other terms accompany those items. If so, those terms apply.

---

BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE.

If you comply with these license terms, you have the rights below.

1. INSTALLATION AND USE RIGHTS.

- You may use any number of copies of the software to design, develop and test your programs that run on a Microsoft Windows operating system.
- This agreement gives you rights to the software only. Any rights to a Microsoft Windows operating system (such as testing pre-release versions of Windows in a live operating environment) are provided separately by the license terms for Windows.

2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

a. Distributable Code. You may modify, copy, and distribute the software, in source or compiled form, to run on a Microsoft Windows operating system.

ii. Distribution Requirements. If you distribute the software, you must

- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- if you modify the software and distribute such modified files, include prominent notices in such modified files so that recipients know that they are not receiving the original software;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs or to your modifications to the software.

iii. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the software;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- include the software in malicious, deceptive or unlawful programs; or
- modify or distribute the source code of the software so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
- the code be disclosed or distributed in source code form; or
- others have the right to modify it.

3. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this



limitation, you may use the software only as expressly permitted in this agreement.

4. EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see <<http://www.microsoft.com/exporting>>.

5. SUPPORT SERVICES. Because this software is “as is,” we may not provide support services for it.

6. ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

7. APPLICABLE LAW.

a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. Outside the United States. If you acquired the software in any other country, the laws of that country apply.

8. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

9. DISCLAIMER OF WARRANTY. THE SOFTWARE IS LICENSED “AS-IS.” YOU BEAR THE RISK OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

10. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

**EXONÉRATION DE GARANTIE.** Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est à votre seule risque et péril. Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité marchande, d'adéquation à un usage particulier et d'absence de contrefaçon sont exclues.

**LIMITATION DES DOMMAGES-INTÉRÊTS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES.** Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement à hauteur de 5,00 \$ US. Vous ne pouvez prétendre à aucune indemnisation pour les autres dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices.

Cette limitation concerne :

- tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et
- les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur.

Elle s'applique également, même si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera pas à votre égard.

**EFFET JURIDIQUE.** Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous confèrent les lois de votre pays si celles-ci ne le permettent pas.



## 5.34. zlib

Name	Version	Comments / usage	Target device
zlib	1.2.11	libpng dependency	x

### Obligation to customer

This component is a required part of the target code as binary code and licensed under the specified license terms (see below). The licensor of the target code is required to comply with the license terms when (sub-)licensing target code.

The license requirements may include:

- ▶ Reproduction of the copyright notice
- ▶ Reproduction of the license terms
- ▶ Reproduction of the source code of the component

The definitive requirements and the manner to fulfill the requirements depend on the specific case and have to be reviewed and determined by the (sub-)licensor of the target code. EB Automotive GmbH assumes no liability and cannot be held responsible for the correctness, completeness or quality of the information provided regarding (sub-)licensor's obligations in respect to the specified component in case of (sub-)licensing the target code.

### Copyright text

version 1.2.11, January 15th, 2017  
Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

### License text

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly      Mark Adler



[jloup@gzip.org](mailto:jloup@gzip.org)

[madler@alumni.caltech.edu](mailto:madler@alumni.caltech.edu)


# Appendix A. Release notes previous versions

## A.1. Release notes 6.7.4

### A.1.1. Migrating from 6.7.3 to 6.7.4

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

---

Migration is performed automatically, when opening a project that was saved with a previous version.

### A.1.2. Fixed issues in 6.7.4

The following list contains fixed issues known at the time of release:

► Fixed missing notifications and initializations

Wrong initial layouting with instantiators is now fixed. Instantiator and **Layout** widget features initialization are now deferred to reduce unnecessary double processing and the evaluation of binary scene description is optimized.


► Fixed `f:getLineCount` script function

The `getLineCount` calculation now also uses the multiline feature properties.

## A.2. Release notes 6.7.3

### A.2.1. Migrating from 6.7.2 to 6.7.3

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

Migration is performed automatically, when opening a project that was saved with a previous version.

### A.2.2. New or changed in 6.7.3

This chapter lists new or changed features of EB GUIDE.

EB GUIDE Studio:

► Search box shortcuts

You could already find every reference of an element, when you select an element and press **F3**. Now, when you already closed the search box with the result, you can bring it back with shortcut **Ctrl+F**.

► Improved model export

The performance is improved when you export an EB GUIDE model or start a simulation.

► libpng

Updated libpng from 1.6.32 to 1.6.35.

► Font caching

You can configure the size of the font cache. The font cache improves the performance of label rendering when the font is changed. The font cache is configured in the `model.json` configuration file. For more information, see section "model.json configuration file" in the EB GUIDE Studio user manual, table "TextEngine configuration items", item `gtf.model.textengine.fontCacheThreshold`.

EB GUIDE GTF

► Framebuffer attachment

It is now possible to get a color attachment from framebuffer. This feature, for example, could be used to generate a dynamic alpha mask at runtime. For more information on `gtf::scdr::Framebuffer::getColorAttachment()`, see API.

## A.2.3. Fixed issues in 6.7.3

The following list contains fixed issues known at the time of release:

► Improved template creation

When you create templates of templates, the performance of the template context menu as well as the **Navigation** component is improved.

► Android device orientation

Orientation changes of Android devices are now handled correctly.

► Hold gesture

Fixed the behavior of the hold gesture when you click and hold during the simulation. When you are in a simulation and event `onGestureHold` is fired, and you move the cursor outside of the window and back in, event `onGestureHold` is now fired as expected.

► Path gesture

Path gestures are now recognized even if the cursor moves outside of the simulation window.

► Missing notifications

Fixed an issue where some notifications were not prompted.

► On screen transitions memory leak

Fixed a memory leak issue in EB GUIDE GTF that occurred during high frequency screen transitions.

► System events and IPC

The EB GUIDE GTF inter-process communication (IPC) is not affected by Android system events any longer. System events are now filtered through the `Eventsystem` module. For more information on `gtf::eventsystem`, see API.

► Memory usage updates


EB GUIDE Monitor now provides updates about the memory usage. This feature is not enabled by default. For instructions on how to enable this feature, see the EB GUIDE GTF user manual section "Evaluating memory usage". When this feature is enabled you receive messages, looking like the following example message:

```
[08:36:24.685] [INFO] System memory allocated by EB GUIDE TF: 1280 KiB (maximum 1280 KiB), Memory Mapped: 15 KiB (maximum 15 KiB)
```

## A.3. Release notes 6.7.2

### A.3.1. Migrating from 6.7.1 to 6.7.2

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

Migration is performed automatically, when opening a project that was saved with a previous version.

### A.3.2. New or changed in 6.7.2

This chapter lists new or changed features of EB GUIDE.

EB GUIDE Studio:

► Out of memory issue

Fixed an out of memory issue by enabling the large memory usage flag.

► No duplication of binary scripts

Scripts with the same binary representation but different context widgets used to be duplicated. Now such scripts are written only once.

► No creation of exporter binary files

Exporter binary files used to be written to memory before being available. Now these files are not written anymore.

EB GUIDE GTF:

► `AnimationBase.h` is now part of the EB GUIDE SDK

You can write your own animation curve widgets and add them to the EB GUIDE model for better performance.

► New traces

New traces are added that allow to measure the shader compilation. EGL start-up traces are changed from `Debug` to `Info`.

### A.3.3. Fixed issues in 6.7.2

The following list contains fixed issues known at the time of release:

▶ Smartwatch demo model

Fixed an access violation in gestures.

▶ Fixed a memory read issue in the EB GUIDE GTF workloop.

▶ Datapool integer list issue

Fixed an issue where a list value from a datapool integer list remained in the memory after it was discarded.

▶ Flow layout behavior

Fixed an issue where label position was not adjusted after a text change.

▶ Fixed an issue where binary shaders did not load.

▶ Visibility flag issue

Fixed an issue where a widget does not disappear when the visibility flag is connected to a datapool item.

▶ Issue during the configuration import


Fixed an issue where the configuration import could not handle an `ObjectList` with `Objects` having multiple items inside

## A.4. Release notes 6.7.1

### A.4.1. Migrating from 6.7 to 6.7.1

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

---

Migration is performed automatically, when opening a project that was saved with a previous version.

### A.4.2. New or changed in 6.7.1

EB GUIDE Studio:

- ▶ The datapool integration is improved to fit the model life cycle better.
- ▶ User-defined properties can be sorted

You can now sort user-defined properties alphabetically using the new button in the **Properties** component. It is also possible to leave the properties unsorted, i.e. in the order they were initially added to your EB GUIDE model.

- ▶ Changes in touch behavior for widgets

With **Touch release** widget feature, touch events can now be consumed by touch reactions.

- ▶ Changes for master image

When you add a master image, the master image is now aligned top left in a view.

- ▶ More configuration options for `GtfFileOutput`

It is now possible to enforce flushing the traces after each trace message with the configuration item `gtf.tracing.PeriodicOutputFlush` set to 0. You can now also disable forced flushing of the messages using the value -1. Any other number greater than 0 sets the time interval for the flushes.

- ▶ Naming of threads

All threads generated from EB GUIDE GTF have a common name convention. All threads end with `@GTF`. If you request `TaskDispatcher` and run it with `runAsync`, you can specify a custom name. The resulting name is `<yourName>@GTF` with `<yourName>` being the name that you specified. Note that it depends on the platform how, if, and where you can observe the name of the thread.

### A.4.3. Fixed issues in 6.7.1

The following list contains fixed issues known at the time of release:

- ▶ The output of the scripted curve fixed

Now the output of the scripted curve for colors that uses alpha values is produced correctly. The output does not change with each execution of the same scripted curve.

- ▶ EB GUIDE GTF does not crash anymore while re-entering the state machine that includes a dynamic state machine list and view transition animations.
- ▶ Changing the priority of dynamic states is not ignored by the focus management anymore.
- ▶ The issue with datapool items solved

If a resource datapool item list with language or skin support has undefined resource files, you can now jump to the corresponding items from the **Problems** component by clicking the warnings links.




## A.5. Release notes 6.7

### A.5.1. Migrating from 6.6 to 6.7

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

---

After migrating an EB GUIDE project from version 6.6 to version 6.7, the following changes apply.

#### Migration of EB GUIDE projects with added custom widgets

It is not possible to migrate an EB GUIDE project with added custom widgets from one EB GUIDE version to another. If your project contains custom widgets, update them with the correct version and then migrate your project.

#### Accessing scene graph nodes in EB GUIDE Script

The structure of the imported scene graph nodes has changed. If in an EB GUIDE Script function you access a property of a scene graph node, you have to manually update the path to the corresponding scene graph node.

#### New concept of VTAs (view transition animations)

The 6.7 EB GUIDE version introduces the VTA expert mode. Due to incompatibility issues, the VTA types that were available in the EB GUIDE 6.6 version cannot be migrated and therefore are removed during migration. If you have VTAs in your EB GUIDE project, note that during the migration all VTAs, which were included in your EB GUIDE project, are removed. Make sure to recreate the removed VTAs.

#### New life cycle concept of EB GUIDE GTF

If you have custom applications, consider the following:

- ▶ If you used the `Runnable` concept, you must switch to the current core stages concept.
- ▶ For more information on the stage concept, see the EB GUIDE TF user's guide, section "5.1.2 Life cycle".
- ▶ For an example, see the EB GUIDE SDK example `CoreStageExample`.

#### New `Scenes` module

If you have custom applications, consider the following:

- ▶ The EB GUIDE SDK interfaces for working with scenes changed.
- ▶ For more information on the `Scenes` module, see the EB GUIDE TF user guide, section "5.4.1 Scenes and Properties".
- ▶ For an example, see the EB GUIDE SDK examples.

### New `Properties` module

If you have custom applications, consider the following:

- ▶ The EB GUIDE SDK interfaces for working with widget properties changed.
- ▶ For more information on the `Properties` module, see the EB GUIDE TF user guide, section "5.4.-1 Scenes and Properties".
- ▶ For an example on how you can access widget properties within new interfaces, see the EB GUIDE SDK examples `ExtendedContainerWidget` or `FocusedWidgetFeature`.

## A.5.2. New or changed in 6.7

This chapter lists new or changed features of EB GUIDE.

### EB GUIDE Studio:

- ▶ New **VTA** component

In the **VTA** (view transition animations) component, it is possible to define view transition animations for views and view templates.

- ▶ Separate directory for view transition animations

All VTAs are stored in the `vtas` directory. Each VTA and each VTA configuration has its own file in the `vtas` directory.

- ▶ By means of a master image, it is possible to align elements

The master image itself is a presentation template which can be displayed (on / off). When it is displayed, you can:

- ▶ Model the view according to the template (master image)
- ▶ Set the position of the widgets according to the template (master image)

- ▶ It is possible to define background colors of states

That means, you have the possibility to set the background color of a state in the state diagram to group states logically.

- ▶ It is possible to comment in `.json` files

Now it is possible to add comments with `//` to `.json` files.

- ▶ New image-based light 3D widget

Now it is possible to illuminate virtual 3D objects with image-based lighting.

### EB GUIDE Monitor:

- ▶ Startup messages and error messages are now transferred and cached

On EB GUIDE GTF startup, trace messages are cached until the EB GUIDE Monitor is connected.

- ▶ It is possible to export and import watch lists of datapool items and events

You can export watch lists to files that can be shared with somebody else. Or you can import watch list files that are shared by someone else.

- ▶ It is possible to load model configuration in EB GUIDE Monitor UI in stand-alone use case

In stand-alone use case, EB GUIDE Monitor offers you now a menu option to load the model configuration.

#### EB GUIDE GTF:

- ▶ It is possible to load precompiled shaders

To reduce EB GUIDE model startup times, it is now possible to load precompiled shaders in EB GUIDE GTF.

- ▶ New EB GUIDE GTF EB GUIDE Script functions:

- ▶ `lerp (linear interpolation)`
- ▶ `smoothstep`
- ▶ `frac`
- ▶ `fmod`
- ▶ `min`
- ▶ `max`
- ▶ `clamp`
- ▶ `saturate`
- ▶ `bool2String`
- ▶ `getConfigItem`
- ▶ `getLineHeight`
- ▶ `getFontAscender`
- ▶ `getFontDescender`
- ▶ `getFontLineGap`
- ▶ `getLabelTextWidth`
- ▶ `getLabelTextHeight`
- ▶ `getImageWidth`
- ▶ `getImageHeight`
- ▶ `getProductString`
- ▶ `getVersionString`

- ▶ `focusMoveTo`
- ▶ `isWidgetOnActiveStatemachine`
- ▶ Command line tool IBLGenerator for image-based lighting
 

It is now possible to use the command line tool IBLGenerator to create image-based lighting.
- ▶ It is possible to create screenshots from the currently active runtime EB GUIDE model
 

EB GUIDE SDK provides the possibility to create screenshots from an active EB GUIDE model.
- ▶ New `Scenes` module that replaces `GtfViewFactory`
- ▶ New `Properties` module that replaces `GtfPropertyContainer`, `GtfWidgetModel` and `GtfWidgetFeatureModel` classes

### A.5.3. Fixed issues in 6.7

The following list contains fixed issues known at the time of release:

- ▶ Widgets within templates can now be globally renamed again
 

The global rename of widgets within a template seemed to work, but were actually only shown in the UI and were not renamed. This is now working again.
- ▶ The issue with `GtfIpc` connection solved
 

Now the `GtfIpc` reconnects successfully if the connection gets lost.
- ▶ The issue with `strokeThickness` larger than 720 pixels solved
 

Now EB GUIDE supports `strokeThickness` up to a value of 786 pixels.
- ▶ The issue with `getTextWidth` EB GUIDE Script functions solved
 

Now it is possible to use `getTextWidth` EB GUIDE Script functions with multiple threads.
- ▶ Unexpected behavior of color animations solved
 

Color animations in curves such as sinus, linear or quadratic are now shown as expected.
- ▶ The issue with with event triggers in datapool description file solved
 

Now events are only executed as trigger for a scripted value if these are configured in a trigger list.
- ▶ Comments possible in JSON files
 

Now it is possible to add comments with `//` to JSON files such as `model.json` and `platform.json`.
- ▶ The issue with reverse animations solved
 

Reverse animations now remain at the end when the animation is finished as expected.

- ▶ Widget with **Moveable** and **Touch move** widget features behaves as expected

If a widget has the **Moveable** and the **Touch move** widget features with its `touchMoved` property set to true, it now remains stationary when you click it.

- ▶ The issue with configurable scenes for logic state machines solved


It is not possible any longer to configure scenes for logic state machines.

## A.6. Release notes 6.6

### A.6.1. Migrating from 6.5.1 to 6.6

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

---

After migrating an EB GUIDE project from version 6.5.1 to version 6.6, the following changes apply.

Microsoft Visual Studio 2017

To build EB GUIDE GTF plugins, use Microsoft Visual Studio 2017.

Structure of datapool and event system header files

Due to the changes in the structure of datapool and event system header files that are generated during the export of an EB GUIDE model, note the following:

- ▶ Adapt all `#include` directives to the new file paths.
- ▶ Update all usages of event and datapool IDs in the `#define` directives to the changed names. For more details, see the exported header files and [chapter 2, “New or changed in 6.8”](#).

### A.6.2. New or changed in 6.6

This chapter lists new or changed features of EB GUIDE.

EB GUIDE Studio:

- ▶ Update of open source components:
  - ▶ LibJPEG Turbo 1.5.3
  - ▶ PowerVR SDK 2017 R2

- ▶ ICU4C 60.2
- ▶ FluentCommandLineParser 1.5.0.20
- ▶ FreeType 2.9
- ▶ ANTLR C# 4.7
- ▶ New basic widget alpha mask

EB GUIDE Studio offers a new basic widget that allows to modify the alpha value of child widgets using an image.

- ▶ Global renaming of states, state machines, views, widgets and event parameters is now possible.
- ▶ Template interface

It is now possible to rename properties that are added to a template interface.

- ▶ Zoom in/out feature

It is now possible to magnify or reduce the content of a view.

- ▶ New animation editor

Animations and curves are no longer available in the **Toolbox** and are not displayed in the **Navigation** area. EB GUIDE Studio now offers the new animation editor in the content area. The following features are added:

- ▶ Preview of curves is available in the content area.
- ▶ You can change the duration of curves using preview handles.
- ▶ You can animate properties and add curves in one dialog.
- ▶ A widget can contain multiple animations of the same property.

#### EB GUIDE GTF:

- ▶ Support of sRGB color space added

You can select the sRGB color space in the Project center. The sRGB color space can be applied to 2D and 3D content and it works with multisampling.

- ▶ Support of bitmap fonts is added.
- ▶ New **Stroke** widget feature

EB GUIDE Studio offers the new **Stroke** widget feature. You can apply this widget feature to labels with TrueType fonts.

- ▶ Cook-Torrance lighting model added

To achieve more realistic rendering results, in EB GUIDE GTF the Cook-Torrance lighting model is implemented. New 3D widgets are added:

- ▶ PBR GGX material
- ▶ PBR Phong material
- ▶ Ambient light
- ▶ If remote framebuffer for a scene is activated, EB GUIDE GTF memory consumption increases due to caching the active scene. This behavior is used for taking screenshots with EB GUIDE Monitor scripts.
- ▶ Changes in the header files of the exported EB GUIDE model

The following changes apply to datapool and event system header files:

- ▶ The structure of the export directory now looks as follows:
 

```
/export/include/global|local/datapool/
/export/include/global|local/events/
```
- ▶ The file names now include the names of the event groups and not the event group IDs.
- ▶ A unique `#define` directive is added for the exported event groups.
- ▶ All `#define` directives are in upper case letters.
- ▶ Comments with names of the elements and type information are added.

For migration instructions, see [chapter 1, “Migrating from 6.7.4 to 6.8”](#).

EB GUIDE Monitor:

- ▶ EB GUIDE Monitor shows the currently selected language and skin.
- ▶ Interaction with state machines is improved.
- ▶ It is now possible to run script for EB GUIDE Monitor from the command line.
- ▶ The new **State machine** component is available.

The **State machine** component shows the active state and state machine.

- ▶ EB GUIDE Monitor plugin interface

EB GUIDE Monitor now has a plugin interface. The EB GUIDE Monitor API is available.

### A.6.3. Fixed issues in 6.6

The following list contains fixed issues known at the time of release:

- ▶ Fixed problem with the synchronize button

The ⇌ synchronize button in the **Navigation** component stays active after the state is updated due to the selection changes in the content area.

► Solved datapool issues in EB GUIDE GTF plugins

The fault tolerance of the initialization of the datapool items is improved. Datapool items can now be initialized even if the `datapool.gtf` file contains resources and the EB GUIDE GTF resource management is not running.

► Fixed the touch behavior of invisible widgets

If a widget has any touch widget feature added and is set to invisible with the **Viewport** widget feature, the widget does not react to touch input.

► Fixed the `types.bin` file issue

If the `types.bin` file is missing, the exported EB GUIDE model starts as expected.

► Fixed issue in the **Logger** component of EB GUIDE Monitor

In EB GUIDE Monitor, in the **Logger** component events are not listed multiple times any more.

► Added information to logfile

If an EB GUIDE GTF plugin fails to load, the corresponding information is added to the EB GUIDE Studio logfile.

► Solved issue with TortoiseSVN client


If the TortoiseSVN client in version 1.6 is used to create the project directory, the simulation of an EB GUIDE model starts as expected.

## A.7. Release notes 6.5.1

### A.7.1. Migrating from 6.5 to 6.5.1

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

---

Migration is performed automatically, when opening a project that was saved with a previous version.

### A.7.2. Fixed issues in 6.5.1

The following list contains fixed issues known at the time of release:



- ▶ Key navigation in the **Assets** component fixed

In EB GUIDE Studio, if the **Assets** component is not completely visible, the navigation inside the component using arrow keys does not lead EB GUIDE Studio to freeze.

- ▶ Fixed linear color animation behavior on ARM SoCs operating systems

On ARM SoCs target operating systems the linear animation of color values generate correct results.

- ▶ Connection issue of EB GUIDE Monitor solved

Disconnecting and reconnecting EB GUIDE Monitor during the simulation is now possible.

- ▶ Fixed background display color on Android systems

The background of a display on Android system has now black color.

- ▶ Unexpected reset of datapool values during start-up fixed

During start-up, applications do not overwrite values of datapool items that already exist.

- ▶ Datapool and event system integration problem fixed

In EB GUIDE models with multiple state machines and different communication contexts, datapool and event systems are connected now.

- ▶ Issue on language settings during start-up solved

If an EB GUIDE model has a conditional script in a datapool item and this script changes the language, on start-up the language changes as expected.

- ▶ Missing symbols are included in the EB GUIDE GTF SDK files

Code in EB GUIDE GTF SDK files is corrected for required export symbols.

- ▶ Issue with a parameter in the configuration file fixed

The parameter `gtf.model.scenes.<scenename>.hwLayerId` is now evaluated correctly.

- ▶ Event duplication fixed

When multiple state machines with different communication contexts and threads are used, the unexpected behavior of events does not occur any more.

- ▶ EB GUIDE Studio layout issue solved

When on Windows operating systems a double-sized task bar is used, EB GUIDE Studio layout is depicted correctly.

- ▶ Issue with `ExternalInput.h` in the EB GUIDE GTF SDK fixed

`ExternalInput.h` in the EB GUIDE GTF SDK is adapted and can now be used with the new event system implementation.

► Concurrent datapool access fixed

During the simulation of an EB GUIDE model when the datapool must be updated very often, the datapool access works as expected without errors.

► Evaluation of command line parameters for EB GUIDE Studio fixed

The command line parameter `-n` now works as expected.

► Custom stage provider issue solved

In the EB GUIDE model scope, the custom stage provider can be used as expected.

► Performance issue in EB GUIDE Studio fixed


When opening an EB GUIDE model that has many images in the resource directory, EB GUIDE Studio reacts as expected.

## A.8. Release notes 6.5

### A.8.1. Migrating from 6.4 to 6.5

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

---

After migrating an EB GUIDE project from version 6.4 to version 6.5, the following changes apply.

#### Migration of EB GUIDE projects with added custom widgets

It is not possible to migrate an EB GUIDE project with added custom widgets from one EB GUIDE version to another. If your project contains custom widgets, update them with the correct version and then migrate your project.

### A.8.2. New or changed in 6.5

This chapter lists new or changed features of EB GUIDE.

#### EB GUIDE Studio:

► New EB GUIDE Monitor

With EB GUIDE Monitor you can observe and control an EB GUIDE model during the simulation. EB GUIDE Monitor includes mechanisms for the communication with datapool, the event system, and the state machines of the EB GUIDE model. The monitor is started automatically in EB GUIDE Studio during the EB GUIDE model simulation but can also be used as stand-alone application.

- ▶ Update of open source components:
  - ▶ Prism 6.2
  - ▶ RapidJSON 1.1.0
  - ▶ PowerVR SDK 2017 R1
  - ▶ Json.Net 9.0.0.0
  - ▶ Command Line Parser Library 1.9.1971
  - ▶ PSD FileType Plugin for Paint.NET
  - ▶ Extended WPF Toolkit 3.0.0
  - ▶ zlib 1.2.11
  - ▶ FreeType 2.8
  - ▶ LibJPEG Turbo 1.5.2
  - ▶ HarfBuzz 1.4.8
  - ▶ LibPng 1.6.32
- ▶ .ppm file format

EB GUIDE Studio no longer supports the image format `.ppm`.

- ▶ New basic widget ellipse

EB GUIDE Studio offers a new basic widget that allows drawing a colored ellipse with the dimensions and coordinates of the widget into a view. In addition, the widget can also be used to draw a sector or an arc.

- ▶ Global renaming of datapool items and events

The new functionality **Rename global** offers the possibility to rename the selected datapool item or event and also its occurrences in the EB GUIDE model.

- ▶ Dockable components

Now it is possible to dock all components of the project editor and in EB GUIDE Monitor as tabs or undock them as floating components. The default layout can be restored in the command area using **Layout > Reset to default layout**.

- ▶ Support for OpenGL ES version 3.1

To display 3D graphics, EB GUIDE Studio now supports the OpenGL ES version 3.1 renderer.

- ▶ Command line

The following improvements were realized:

- ▶ Command line validation

It is now possible to validate an EB GUIDE model using the command line. The result is saved to a logfile.

- ▶ Language import

It is now possible to import language-dependent texts using the command line.

- ▶ Skin support

It is now possible to define values in datapool items for the EB GUIDE model using skin support functionality. When skin support is added to a datapool item, all available skins in the EB GUIDE model are displayed in the **Properties** component in a table. Skins can be added and removed.

Language and skin support for datapool items are mutually exclusive.

- ▶ Events and event system

The following improvements were realized for events:

- ▶ Events are now displayed in the new **Event** component. Here you can also add new events, edit and search for events and jump directly to them.
- ▶ The event system has a new API based on `UUIDs`.

- ▶ Datapool

- ▶ The event system has a new API based on `UUIDs`.
- ▶ New **Datapool** component is added to the project editor. The **Datapool** component allows adding **Datapool** items and editing **Name** and **Value** properties. The following properties are removed from the datapool:

- ▶ Reader ID
- ▶ Reader context
- ▶ Writer ID
- ▶ Writer context
- ▶ Windowed

- ▶ **Assets** component

New **Assets** component is added to the project editor. The **Assets** component allows adding resources such as images, fonts, and `.ebmesh` files using drag-and-drop. All resources from the `$GUIDE_PROJECT_PATH\resources` directory and its subdirectories are displayed in the preview area of the component.

- ▶ Import of `.psd` images

The **Assets** component allows adding `.psd` images. An image with multiple layers is displayed in the view state with multiple widgets, whereas each layer is represented by a widget.

- ▶ EB GUIDE script function for shutdown changed:

The script function `f:request_runlevel(...)` was removed. The new script function `f:shutdown()` shuts down the system and, depending on the system integration, also the display.

#### EB GUIDE TF:

- ▶ New life cycle concept

EB GUIDE TF offers two different life cycle concepts:

- ▶ The core life cycle drives the start-up of the framework.
- ▶ The EB GUIDE model life cycle drives the start-up of an HMI model.

The EB GUIDE model life cycle offers the functionality to add a custom stage at any point during the EB GUIDE model life cycle.

- ▶ Android APK system requirements

The minimal system requirements for the Android APK are updated to Android 5.0 (API Level 21).

- ▶ Datapool

Implemented new concept for datapool.

#### EB GUIDE Monitor:

- ▶ Scripting in EB GUIDE Monitor


EB GUIDE Monitor offers the **Scripting** component to start scripts. The **Scripting** component is not in the default layout. The component is added by clicking **Layout > Scripting**.

## A.9. Release notes 6.4.1

### A.9.1. Migrating from 6.4 to 6.4.1

#### NOTE



Before you migrate a project, make sure your project is free of errors. To do so, open your project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when no errors and warnings occur anymore.

Migration is performed automatically, when opening a project that was saved with a previous version.

## A.9.2. New or changed in 6.4.1

This chapter lists new or changed features and solved issues of EB GUIDE.

► Wrong calculation of `getTextHeight` solved

Negative font size values in some cases have led to a wrong calculation of the text height. If the font size is set to a negative value, it is now always treated as 0.

► Animated view transitions fixed

If an EB GUIDE Studio model contains a dynamic state machine and two or more views with an animated view transition, but with no corresponding entry and/or exit animation, memory layout problems do not occur anymore.

► EB GUIDE GTF problems with animations solved

When an animation was played and reversed and this animation was then disabled in the project, EB GUIDE GTF does not crash anymore when the simulation is started anew.

► Behavior of object lists in templates fixed

When a template containing an object list is used in an instantiated template and EB GUIDE Studio is restarted, the list in the template instance now contains the correct number of objects.

► Coloration effect for animations fixed


The **linear interpolation curve** now works correctly when changing the color.

## A.10. Release notes 6.4

### A.10.1. Migrating from 6.3 to 6.4

---

**NOTE**

Before you migrate a project, make sure your project is free of errors. To do so, open the project with your current EB GUIDE Studio version and click  in the problems area. Start migration only when the number of errors and warnings is reduced to zero.

---

After migrating an EB GUIDE project from version 6.3 to version 6.4, the following changes apply.

#### **Shearing** widget feature

The **x** and **y** properties of the **Shearing** widget feature are now applied correctly to the corresponding **x** and **y** values. After the migration, check and change all **x** and **y** values that belong to the **Shearing** widget feature in your EB GUIDE Studio model.

## A.10.2. New or changed in 6.4

EB GUIDE Studio:

- ▶ 3D widgets

EB GUIDE Studio offers a new 3D widget set that allows importing 3D graphics as a scene graph and editing it. Configurable sub-elements of a scene graph are meshes, cameras, spot lights, point lights, directional lights, scene graph nodes and materials.

3D model widget as well as widget properties and datapool items of type `3D model` are no longer available.

In addition, it is possible to add reflection cube maps using the **Reflection texture** widget feature for materials.

- ▶ Search functionality

The new search box in the command area offers the possibility to search for the following elements:

- ▶ All kinds of model elements such as views, templates, and datapool items
- ▶ Text within EB GUIDE Scripts

Clicking a model element and pressing **F3** starts a reference search: It lists all occurrences of the model element in the EB GUIDE model.

- ▶ EB GUIDE project structure

As of version 6.4, EB GUIDE introduced a new project structure, which provides a better overview about the EB GUIDE model. There are dedicated directories for views, state machines, templates, resources and configuration. Datapool items and events are stored in the files `datapool.gdata` and `events.gdata` respectively.

EB GUIDE projects that were created with an older version of EB GUIDE are automatically adapted to the new structure during migration.

- ▶ Copy and paste of model elements

It is possible to copy and paste the following model elements via shortcuts and context menu:

- ▶ Widgets
- ▶ States

- ▶ EB GUIDE Script functions

The following EB GUIDE Script functions are removed from the EB GUIDE Script standard library:

- ▶ `formatInteger`
- ▶ `formatFloat`

For details, see the EB GUIDE documentation, section **References**.

► **Shearing** widget feature

In previous versions, the **Shearing** widget feature applied the value of the `shearingYbyX` property to `shearingXbyY` and the value of the `shearingXbyY` property to `shearingYbyX`. This issue has been fixed.

► OpenVG renderer

OpenVG renderer is not supported any more.

► `.svg` file format

EB GUIDE Studio no longer supports images in the `.svg` file format.

► **Appearance** widget feature category

The following widget features are no longer available:

► **Rounded**

► **FillPattern**

► **LinearFillGradient**

► **RadialFillGradient**

► EB GUIDE GTF SDK

EB GUIDE GTF SDK no longer includes `GtfInternalInputEvent.h`.

EB GUIDE GTF SDK now contains `GtfStaticAssert.h`.

## A.11. Release notes 6.3


### A.11.1. Migration from 6.2 to 6.3

After migrating an EB GUIDE project from version 6.2 to version 6.3, the following changes apply.

---

**NOTE**



Before you migrate a project, make sure your project is free of errors. To do so, open your project with EB GUIDE Studio 6.2 and click  in the problems area. Start migration only when the number of errors and warnings is reduced to zero.

- 
- For the **Touched** widget feature the `touchBehavior` property is available. The value `Visible pixels` (=1) is replaced by the value `Whole area` (=0) for labels and 3D graphics. Therefore it also effects the classes `GtfLabel` and `GtfModel`.



- ▶ The `normalized` property is deleted from the 3D graphic extension widget feature.

## A.11.2. New or changed in 6.3

In addition to what is described in user documentation, EB GUIDE offers the following features.

### Migration:

For migration issues from previous versions please contact your sales representative.

- ▶ Language import and export

To display EB GUIDE models in different languages, EB GUIDE supports exporting, editing, and importing all language dependent texts.

You export texts to an `.xliff` (XML Localization Interchange File Format) file and forward the file to a translation agency. After importing the translated file back into EB GUIDE Studio, the texts that are displayed in your EB GUIDE model are available in a different language.

- ▶ Improved usability

For a better usability the **Properties** panel and the **Toolbox** are arranged on the left side of the screen.

Additionally a breadcrumb navigation is introduced to the content area, which displays the hierarchy of the selected model element.

- ▶ Copy and paste of model elements

It is possible to copy and paste the following model elements via shortcuts and context menu:

- ▶ View states
- ▶ Templates
- ▶ Events
- ▶ Datapool items
- ▶ EB GUIDE Script functions

EB GUIDE Script offers the following new functions:

- ▶ `format_float`
- ▶ `format_int`

The following EB GUIDE Script functions are now deprecated:

- ▶ `formatInteger`
- ▶ `formatFloat`

For details, see the EB GUIDE documentation, section **References**.

- ▶ The `currentLineCount` widget property of the **Multiple lines** widget feature is no longer available.
- ▶ Support for Filmbox files

For 3D graphics, Filmbox (`.fbx`) is now the preferred file format. In addition to that, Collada files (`.dae`) are still supported.

## A.12. Release notes 6.2


### A.12.1. Migration from 6.1 to 6.2

After migrating an EB GUIDE project from version 6.1 to version 6.2, the following changes apply.

---

#### NOTE



Before you migrate a project, make sure your project is free of errors. To do so, open your project with EB GUIDE Studio 6.1 and click  in the problems area. Start migration only when the number of errors and warnings is reduced to zero.

---

- ▶ The following widget features have been renamed:
  - ▶ **State enabled** is now called **Enabled**.
  - ▶ **State selected** is now called **Selected**.
  - ▶ **State focused** is now called **Focused**.
  - ▶ **State pressed** is now called **Pressed**.
  - ▶ **State touched** is now called **Touched**.
  - ▶ **Multi-state** is now called **Child visibility selection**.
  - ▶ **Button group** is now called **Selection group**.
  - ▶ **Rotary button** is now called **Spinning**.
  - ▶ **Line template index** is now called **Template index**.
  - ▶ **Multi-line** is now called **Multiple lines**.

After migrating an EB GUIDE project, the above widget features are displayed with the new names.

- ▶ After migration, animation templates that were added to a project in version 6.1 are still displayed, even though animation templates cannot be added with version 6.2.
- ▶ If there is a link from a language-dependent datapool item to another datapool item, the source datapool item is no longer language-dependent after migration.

- ▶ The **Border** widget feature is removed from images and labels.
- ▶ If the `model` property of a 3D graphic contains a file with a different file type than `.dae`, the value of the `model` property is deleted.

## A.12.2. New or changed in 6.2

In addition to what is described in user documentation, EB GUIDE offers the following features.

Migration:

For migration issues from previous versions please contact your sales representative.

EB GUIDE Studio:

- ▶ View transition animation

You can define a moving or fading animation for entering or exiting a view. You define view transition animations for view templates.

- ▶ EB GUIDE Script operator precedence

In EB GUIDE Script, handling of operator precedence and associativity has been improved.

- ▶ 3D widgets

The following widgets and their corresponding widget features are no longer available:

- ▶ Light and material effect
  - ▶ Cube texture
  - ▶ Diffuse texture
  - ▶ Normal texture
  - ▶ Second light source
- ▶ Light effect
  - ▶ Second light source
- ▶ Material effect
  - ▶ Cube texture
  - ▶ Diffuse texture
  - ▶ Normal texture
- ▶ No lighting effect
- ▶ New property type `Function () : bool`

It is possible to add a user-defined widget property of type `Function () : bool`. The new property is a function that has no parameters and returns a boolean value. You call the function in EB GUIDE Script in the way you address widget properties.

Example:

```
v:this."FunctionTestName"()
```

- ▶ It is not possible to add a template of type animation.
- ▶ The **Border** widget feature is no longer available for images and labels.

## A.13. Release notes 6.1

### A.13.1. Migration from 6.0 to 6.1 and compatibility

After migrating an EB GUIDE project from version 6.0 to version 6.1, the following changes apply.

- ▶ After migration, the following data is removed from EB GUIDE project files:
  - ▶ The **Toggle button** widget feature
  - ▶ The **Virtual layer** widget feature
  - ▶ The `lineSeparator` property of the **Multi-line** widget feature
  - ▶ The `activate_trigger` property and the `deactivate_trigger` property of dynamic state machines
- ▶ Language identifiers are removed.

In EB GUIDE languages are addressed by their names. After migration, using language identifiers causes an error.



#### Example A.1. Language change

See the difference between addressing a language in EB GUIDE Studio 6.0 and EB GUIDE Studio 6.1.

```
f:language(1)           // language change in EB GUIDE Studio 6.0

f:language(1:English) // language change in EB GUIDE Studio 6.1
```

► Equality operators for resource data types

Events and resource data types, for example 3D graphics, fonts and images, do not support the equality operators (==) and (!=). These equality operators cause an error after migration.

## A.13.2. New or changed in 6.1

In addition to what is described in user documentation, EB GUIDE offers the following features.

Migration:

For migration issues from previous versions please contact your sales representative.

EB GUIDE Studio:

► Comment column for libraries and messages

It is possible to add comments for libraries and messages in the profiles of an EB GUIDE model.

► The widget feature dialog does not open in the **Properties** panel anymore. An additional panel for widget features is available.

► `textTruncation` widget feature

For the `textTruncation` widget feature, the `truncationPolicy` property can assume one of the following values:

► `trailing`

► `leading`

The option `center` is no longer available.

Non-linked widget feature property values are migrated.

► Bidirectional text in labels

The handling of bidirectional text in labels has been improved. Now it complies to Unicode 8.0.

► Widget features

The following widget features are no longer supported by EB GUIDE Studio:

► **Toggle button**

► **Virtual layer**

► Availability of equality operators

Events and resource data types, for example 3D graphics, fonts and images, do not support the equality operators (==) and (!=).

► EB GUIDE Script data types

The following data types are no longer supported by EB GUIDE Script:

- int8 and int8 list
- int16 and int16 list
- int64 and int64 list
- uint8 and uint8 list
- uint16 and uint16 list
- uint32 and uint32 list
- uint64 and uint64 list

► EB GUIDE Script

The following functions are no longer supported:

- `getProviderVersion`
- `getProviderName`

► Parameter for `ActionDescriptor`

The parameter `action flag` is no longer supported.

► EB GUIDE Script function for dynamic state machine

For dynamic state machine modeling, EB GUIDE Script offers a new function:

- `IsDynamicStateMachineActive`

EB GUIDE TF:

► While displaying a text the following characters are replaced:

The sequence `\\ '\\` is replaced by `\\`. The sequence `\\ 'n'` is replaced by `\\n`. In case the text is displayed in one line, `\\n` is replaced by `' '` additionally.

## A.14. Release notes 6.0

### A.14.1. Migrating from 5.5.3 to 6.0

The following chapter provides instructions on the steps needed to migrate to a newer version of EB GUIDE.



## Exporting data from EB GUIDE 5.5.3

Step 1

Start EB GUIDE Studio 5.5.3.

Step 2

Open a project.

Step 3

Go to the bottom-center of the main window and click the **Problems** tab.

Step 4

In the **Problems** component, click the **Check** button.

Step 5

Resolve the problems and warnings before you continue.

Step 6

From the **Plugins** menu, select **Plugin list**.

Step 7

Select **5To6Migrator** and click **OK**.

Step 8

From the **Plugins** menu, select **EB GUIDE 5 to 6 export > Start data export**.

A dialog opens.

Step 9

Select a directory for the export of project files.

Step 10

Confirm with **OK**.

The export starts.



## Migrating data to EB GUIDE 6.0

Step 1

Start EB GUIDE 6.0.

Step 2

In the project center, select the **OPEN** tab.

Step 3

Select the directory to which you exported the project from EB GUIDE 5.5.3.

Step 4

Click the **OPEN** button.

**NOTE****The EB GUIDE 5To6Migrator plugin does not preserve customized start-up settings**

The migrated project gets a default simulation and edit configuration, which contains settings for the main state machine and the default set of libraries and messages. Check and adapt the configurations if necessary.

## A.14.2. New or changed in 6.0



In addition to what is described in user documentation, EB GUIDE offers the following features.

Migration:

For migration issues from previous versions please contact your sales representative.

EB GUIDE Studio:


- ▶ Undo/redo functionality

In EB GUIDE Studio, click  to repeat your last action and  to undo your last action.


- ▶ Language switching

To add a language to your EB GUIDE model, go to the project center and click **CONFIGURE > Languages**. In the content area you add or delete languages and define the default language.

- ▶ List editor

Datapool items of list types such as integer lists or image lists can be edited as follows. Select the datapool item. In the **PROPERTIES** panel go to the **Value** property and click . In the dialog that opens, you add, delete, clone, and modify list items.

- ▶ Type conversion

Datapool items can be converted to scripted values as follows. Select a datapool item in the navigation area. In the **PROPERTIES** panel go to the **Value** property and click the  icon next to the property. In the context menu, click **Convert to script**. To convert the datapool item back to a plain value, click **Convert to plain value**.

- ▶ Dynamic state machines

Dynamic state machines are not automatically started at system start. They run in parallel to other state machines and can be started (pushed) and stopped (popped) during run-time.

For dynamic state machine modeling, EB GUIDE Script offers the following functions:

- ▶ Push dynamic state machine



- ▶ Pop dynamic state machine
- ▶ Remove all dynamic state machines
- ▶ Change priority

To use the above mentioned EB GUIDE Script functions, do the following:

- ▶ Add a dynamic state machine to your EB GUIDE model.
- ▶ In the navigation area select a state machine, view state or compound state to which you want to run in parallel the dynamic state machine.
- ▶ In the the **PROPERTIES** panel, select the **Dynamic state machine list** check box .

With these prerequisites done, you use EB GUIDE Script functions that are related to dynamic state machines.

▶ EB GUIDE Script data types

The following data types are no longer supported by EB GUIDE Script:

- ▶ int8 and int8 list
- ▶ int16 and int16 list
- ▶ int64 and int64 list
- ▶ uint8 and uint8 list
- ▶ uint16 and uint16 list
- ▶ uint32 and uint32 list
- ▶ uint64 and uint64 list

EB GUIDE TF:

- ▶ While displaying a text the following characters are replaced:

The sequence '\\' '\\' is replaced by '\\'. The sequence '\\ 'n' is replaced by '\\n'. In case the text is displayed in one line, '\\n' is replaced by ' ' additionally.