

HERE SDK for iOS

Release Notes

Online Version 2.1.2

The logo for HERE, consisting of the word "here" in a bold, blue, lowercase sans-serif font, rotated diagonally.

Contents

Legal Notices	3
Document Information	4
Overview	5
Target Audience	6
Release Content	7
Package Description	8
System Requirements	9
Features Overview	10
Getting Started	11
Upgrading from HERE SDK v1.x to v2.x	12
New Features and API Changes	13
Fixed Issues and Improvements	14
Known Issues	15
Copyright Information	16

Legal Notices

© 2015 HERE. All rights reserved.

This material, including documentation and any related computer programs, is protected by copyright controlled by HERE. All rights are reserved. Copying, including reproducing, storing, adapting or translating, any or all of this material requires the prior written consent of HERE. This material also contains confidential information, which may not be disclosed to others without the prior written consent of HERE.

Trademark Acknowledgements

HERE and Nokia are trademarks or registered trademarks of Nokia Corporation in the United States and other countries.

Other trade names are trademarks or registered trademarks of their owners.

Disclaimer

This content is provided "as-is" and without warranties of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, satisfactory quality and non-infringement. Nokia does not warrant that the content is error free and Nokia does not warrant or make any representations regarding the quality, correctness, accuracy, or reliability of the content. You should therefore verify any information contained in the content before acting on it.

To the furthest extent permitted by law, under no circumstances, including without limitation Nokia's negligence, shall Nokia be liable for any damages, including, without limitation, direct, special, indirect, punitive, consequential, exemplary and/ or incidental damages that result from the use or application of this content, even if Nokia or an authorized representative has been advised of the possibility of such damages.

Document Information

Product

Name: HERE SDK for iOS

Version: Online Version 2.1.2

Document

Name: HERE SDK for iOS Release Notes

Id: b96d864-1428522034

Status: FINAL

Date: 2015-Apr-08, 19:52 (GMT)

Overview

The HERE SDK for iOS brings a rich and immersive location experience with beautiful and accurate maps, a global database of Places and a world-class routing capability. The HERE SDK for iOS comprises of the Hybrid Engine and the HERE APIs for iOS. The Hybrid Engine is a sophisticated component for rendering map data and route calculation.

The scope of this document is to provide the release notes of the HERE SDK for iOS, with respect to a particular release version. It also includes the issues reported, open and solved within this release.

Target Audience

This document is targetted at the developers who are already familiar with iOS app development. Readers should have some experience using Xcode and Objective-C.

Release Content

Native APIs	Enabling native applications to leverage HERE functionality
Hybrid Engine	Engine responsible for rendering vector map data
Documentation	API Reference Documentation, Developer Guide
Sample App/Code	One or more sample applications

Package Description

<code>/docs</code>	DocSet API Reference
<code>/sample-apps</code>	Sample iOS application project that demonstrates the HERE SDK
<code>/user-guide</code>	Developer's Guide and API Reference for using the HERE SDK features
Release Notes (PDF file)	This document
SDK Notices (HTML file)	Legal and copyright text for the libraries that are used by the HERE SDK. Developers that use the HERE SDK must embed or link to this text from their app.

- **Note:** Evaluation releases can only be used for a limited time. If the evaluation expiry date is within the next 30 days, a warning message is displayed on the map. For more information about the SDK evaluation period, please contact your HERE representative.

System Requirements

- iOS 7.0 or above
- Xcode 6-based development environment
- iPhone 4S / iPad 2 or newer devices

Features Overview

Mapping:

- Dynamically download vector maps for over 190 countries in over 50 languages
- Map styles: normal street map, night street map, satellite, and more
- Touch gestures such as tap, pan, pinch, and twist
- Overlay objects on the map such as polylines, polygons, icons, routes
- 3D landmarks
- Extruded buildings
- 3D map objects

Search:

- Broad content with 25 million streets, 200 million point addresses, and over 60 million categorized places across the globe
- Search Places for somewhere specific or explore by categories
- Get rich details for a Place (images, ratings, reviews, editorials etc.)
- Perform Geocoding and Reverse Geocoding lookups

Directions:

- Get driving directions, pedestrian directions
- Specify preferred route type (fastest or shortest) and route options (such as avoiding toll roads, motorways, and parks)
- Alternate routes

Getting Started

Please refer to the documentation under the `/user-guide` folder for details on how to quickly start evaluating the HERE SDK for iOS.

- **Note:** Developers using the HERE SDK for iOS in their application projects must embed or link to the legal text provided in [Copyright Information](#) on page 16 from a user-accessible area of their application.

Upgrading from HERE SDK v1.x to v2.x

Version 2.0 of the HERE SDK for iOS introduces a number of significant changes. Developers upgrading from version 1.x to version 2.x should be aware of the following:

Map Data

For HERE SDK release 2.0, the map data cache has been re-designed, and it is not backwards compatible with previous SDK releases. In particular, the old cache (located in the `NokiaMaps2` directory) is removed, and a new cache (located at the `HereMaps` directory) will be used instead. Any previously downloaded map data will not carry over to the 2.0 release. Users must re-download all data again by panning the map to the desired geographical areas.

New Features and API Changes

New Features in Version 2.1.1

- Added a warning message that appears on the map view when the SDK evaluation expires in less than 30 days
- Added support for the latest iPad devices

API and Behavior Changes in Version 2.1.1

- `CoreMedia.framework`, `CoreMotion.framework`, and `libsqlite3.dylib` are now required
- Added `referenceIdentifierForSource:` for external references in `NMAPlace`, `NMAPlaceLocation`, and `NMAPlacelink`
- Added the `sources` property and the `addSource:` method to support external references in `NMARequest`
- Added constant `NSString` values and the `createLookupRequestWithReferenceIdentifier:inSource:` method in `NMAPlaces` to support external reference sources
- Added the `topLevelCategories` property in `NMAPlaces` to retrieve localized `NMACategory` instances, if available
- Added the `refreshTopLevelCategoriesWithCompletion` method in `NMAPlaces` to allow users to refresh the localized top level categories manually
- Added the following to `NMAApplicationContext` to support switching the SDK to offline mode.
 - `setNetworkAccessAllowed:`
 - `isNetworkAccessAllowed`
 - `isOnline`
 - `NMAApplicationContextOnlineStatusDidChangeNotification`
- Added the `NMARouteTta` class
- Deprecated the `duration` property in `NMARoute`. Replaced it with the `ttt` property and the `tttForSubleg:subleg` method to allow users to retrieve route duration.
- Added `NMARouteViolatedOption` enum to report additional information about routes in the `NMARouteManagerDelegatedidCalculateRoutes:withError:violatedOptions:` callback
- Added `NMAMapView` `minimumZoomLevel` property to report the true minimum zoom level with current map properties.

Fixed Issues and Improvements

Version 2.1.2

- Improved the detection of pinch-to-zoom gestures and reduced the possibility of accidental rotations
- Fixed an issue where `NMAMapPolygon isValid` incorrectly returns `YES`
- Fixed an issue that caused an `NSInvalidArgumentException` during application start-up

Version 2.1.1

- Fixed an issue where map views are still interactive when rendering is disabled
- Fixed a crash in `NMARouteManager` when cancelling a route calculation
- Fixed an issue where maneuver callbacks are not sent during tunnel extrapolation
- Fixed `NMAAddress.formattedText` for both Places and Geocode search
- Fixed a text spacing issue in Place addresses

Version 2.1

- Fixed an issue on iOS 8 where the position indicator is missing from the map.
- Position indicator is no longer shown underneath traffic incidents and bus stops.
- Updated device information codes for iPhone 6 and 6 Plus.
- Handled the deprecation of old map gestures as follows:
 - Repeated tap gestures no longer interrupt zoom-in/zoom-out. Instead, they will now occur continuously
 - Performing the two-finger pinch/spread gestures will now cause kinetic zoom-in/zoom-out
 - Performing the two-finger rotation gesture will now cause a kinetic rotation
- Highways numbers no longer blink on the map.
- Introduced a map scale modification for iPhone 6 Plus
- The `NMAImage initWithUIImage:` method now takes the scale of the input `UIImage` into account.
- Map view is no longer frozen after changing the map scheme.
- Added 3x logos and icons.

Known Issues

- `NMACompositeView` - The camera view may become distorted when the device orientation switches repeatedly, or if the orientation is changed from its previous state before the app comes to the foreground.

Copyright Information

- Note:** Developers using the HERE SDK for iOS in their application projects must embed or link to the following legal text from a user-accessible area of their application.

© 2014 HERE. All rights reserved.

HERE, Nokia and Nokia Connecting People are trademarks or registered trademarks of Nokia Corporation. Other product and company names mentioned herein may be trademarks or tradenames of their respective owners

This product includes certain open source software. Please see below for applicable copyright and other notices, permissions and acknowledgements:

* boost: 1.52

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

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, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

* Curl: 7.36.0

Notices to be included into the product documentation of binary distributions:

* Copyright (c) 1995, 1996, 1997, 1998, 1999 Kungliga Tekniska Högskolan

* (Royal Institute of Technology, Stockholm, Sweden).

* Copyright (c) 2004 - 2006 Daniel Stenberg

* 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.
*
* 3. Neither the name of the Institute 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 INSTITUTE 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 INSTITUTE 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 (c) 2003 The OpenEvidence Project. 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, the following disclaimer,
* and the original OpenSSL and SSLeay Licences below.
*
* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions, the following disclaimer
* and the original OpenSSL and SSLeay Licences below in
* the documentation and/or other materials provided with the
* distribution.
*
* 3. All advertising materials mentioning features or use of this
* software must display the following acknowledgments:
* "This product includes software developed by the OpenEvidence Project
* for use in the OpenEvidence Toolkit. (http://www.openevidence.org/)"
* This product includes software developed by the OpenSSL Project
* for use in the OpenSSL Toolkit (http://www.openssl.org/)"
* This product includes cryptographic software written by Eric Young
* (eay@cryptsoft.com). This product includes software written by Tim
* Hudson (tjh@cryptsoft.com)."
*
* 4. The names "OpenEvidence Toolkit" and "OpenEvidence Project" must not be
* used to endorse or promote products derived from this software without
* prior written permission. For written permission, please contact
* openevidence-core@openevidence.org.
*
* 5. Products derived from this software may not be called "OpenEvidence"
* nor may "OpenEvidence" appear in their names without prior written
* permission of the OpenEvidence Project.
*
* 6. Redistributions of any form whatsoever must retain the following
* acknowledgments:
* "This product includes software developed by the OpenEvidence Project
* for use in the OpenEvidence Toolkit (http://www.openevidence.org/)"
* This product includes software developed by the OpenSSL Project
* for use in the OpenSSL Toolkit (http://www.openssl.org/)"
* This product includes cryptographic software written by Eric Young
* (eay@cryptsoft.com). This product includes software written by Tim
* Hudson (tjh@cryptsoft.com)."
```

```

* THIS SOFTWARE IS PROVIDED BY THE OpenEvidence PROJECT ``AS IS'' AND ANY
* EXPRESSED 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 OpenEvidence PROJECT OR
* ITS 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.
* =====
*
* This product includes software developed by the OpenSSL Project
* for use in the OpenSSL Toolkit (http://www.openssl.org/)
* This product includes cryptographic software written by Eric Young
* (eay@cryptsoft.com). This product includes software written by Tim
* Hudson (tjh@cryptsoft.com).
-----

* Copyright (c) 1983 Regents of the University of California.
* 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.
* 3. All advertising materials mentioning features or use of this software
* must display the following acknowledgement:
* This product includes software developed by the University of
* California, Berkeley and its contributors.
* 4. Neither the name of the University 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 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 (c) 2003 Simtec Electronics
*
* Re-implemented by Vincent Sanders <vince@kyllicki.org> with extensive
* reference to original curl example code
*
* 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. The name of the author may not 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.

*****
* Freetype: 2.4.8
*****
Use this text in documentation to acknowledge FreeType project:

"Portions of this software are copyright 1996-2002 The FreeType Project (www.freetype.org).
All rights
reserved."

Additional notice for documentation of binary releases:
*****

/* Copyright (C) 2005 by George Williams */
/*
* 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.
*
* The name of the author may not 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.

*****
* libjpeg: 6b
*****
If the software is distributed in binary, please insert the following notice into product
documentation:
*****

"This software is based in part on the work of
the Independent JPEG Group".

*****
* libjson: 7.6.1
*****
This license is also available in Documentation.pdf

Copyright 2010 Jonathan Wallace. All rights reserved.
Copyright 2011 Streamwide. 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 JONATHAN WALLACE ``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 JONATHAN WALLACE 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.

```
*****
* libpng: 1.2.37
*****
```

Notice to be included into the product documentation, no matter what the distribution method is:

```
*****
```

```
* copyright (C) 1999 by Willem van Schaik <willem@schaik.com>
*
* version 1.0 - 1999.10.15 - First version.
*
* Permission to use, copy, modify, and distribute this software and
* its documentation for any purpose and without fee is hereby granted,
* provided that the above copyright notice appear in all copies and
* that both that copyright notice and this permission notice appear in
* supporting documentation. This software is provided "as is" without
* express or implied warranty.
```

```
----
```

Additional notices for binary distributions:

[The following text can be omitted, if the sw is distributed according to the terms of the GPL]

```
*****
```

Copyright (c) 1998-2007 Greg Roelofs. All rights reserved.

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. Redistributions of source code must retain the above copyright notice, disclaimer, and this list of conditions.
2. Redistributions in binary form must reproduce the above copyright notice, disclaimer, and this list of conditions in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

This product includes software developed by Greg Roelofs and contributors for the book, "PNG: The Definitive Guide," published by O'Reilly and Associates.

```
*****
* lzma: 9.22beta
*****
```

This file is in the public domain.

```
*****
* Nanum gothic: 2.0
*****
SIL OPEN FONT LICENSE

Version 1.1 - 26 February 2007
PREAMBLE

The goals of the Open Font License (OFL) are to stimulate worldwide
development of collaborative font projects, to support the font creation
efforts of academic and linguistic communities, and to provide a free and
open framework in which fonts may be shared and improved in partnership
with others.

The OFL allows the licensed fonts to be used, studied, modified and
redistributed freely as long as they are not sold by themselves. The
fonts, including any derivative works, can be bundled, embedded,
redistributed and/or sold with any software provided that any reserved
names are not used by derivative works. The fonts and derivatives,
however, cannot be released under any other type of license. The
requirement for fonts to remain under this license does not apply
to any document created using the fonts or their derivatives.

DEFINITIONS

"Font Software" refers to the set of files released by the Copyright
Holder(s) under this license and clearly marked as such. This may
include source files, build scripts and documentation.

"Reserved Font Name" refers to any names specified as such after the
copyright statement(s).

"Original Version" refers to the collection of Font Software components as
distributed by the Copyright Holder(s).

"Modified Version" refers to any derivative made by adding to, deleting,
or substituting # in part or in whole # any of the components of the
Original Version, by changing formats or by porting the Font Software to a
new environment.

"Author" refers to any designer, engineer, programmer, technical
writer or other person who contributed to the Font Software.

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 Font
Name(s) unless explicit written permission is granted by the corresponding
Copyright Holder. This restriction only applies to the primary font name as
presented to the users.

4) The name(s) of the Copyright Holder(s) 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 the
Copyright Holder(s) and the Author(s) or with their explicit written
permission.
```

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

This license 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 THE COPYRIGHT HOLDER 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.

```
*****
* OpenSSL: 1.0.1i
*****
```

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)

====

```
/* Copyright (c) 2004 Kunliga Tekniska Högskolan
 * (Royal Institute of Technology, Stockholm, Sweden).
 * 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.
 *
 * 3. Neither the name of the Institute 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 INSTITUTE 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 INSTITUTE 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 2002 Sun Microsystems, Inc. ALL RIGHTS RESERVED.
```

```

/* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
 * All rights reserved.
 *
 * This package is an SSL implementation written
 * by Eric Young (eay@cryptsoft.com).
 * The implementation was written so as to conform with Netscapes SSL.
 *
 * This library is free for commercial and non-commercial use as long as
 * the following conditions are aheared to. The following conditions
 * apply to all code found in this distribution, be it the RC4, RSA,
 * lhash, DES, etc., code; not just the SSL code. The SSL documentation
 * included with this distribution is covered by the same copyright terms
 * except that the holder is Tim Hudson (tjh@cryptsoft.com).
 *
 * Copyright remains Eric Young's, and as such any Copyright notices in
 * the code are not to be removed.
 * If this package is used in a product, Eric Young should be given attribution
 * as the author of the parts of the library used.
 * This can be in the form of a textual message at program startup or
 * in documentation (online or textual) provided with the package.
 *
 * 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 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. All advertising materials mentioning features or use of this software
 * must display the following acknowledgement:
 * "This product includes cryptographic software written by
 * Eric Young (eay@cryptsoft.com)"
 * The word 'cryptographic' can be left out if the rouines from the library
 * being used are not cryptographic related :-).
 * 4. If you include any Windows specific code (or a derivative thereof) from
 * the apps directory (application code) you must include an acknowledgement:
 * "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
 *
 * THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``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 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 licence and distribution terms for any publically available version or
 * derivative of this code cannot be changed. i.e. this code cannot simply be
 * copied and put under another distribution licence
 * [including the GNU Public Licence.]

```

====

```

Copyright (C) 1998-2008 The OpenSSL Project. All rights reserved.
Copyright 2002 Sun Microsystems, Inc. ALL RIGHTS RESERVED.
Copyright 2006 NTT (Nippon Telegraph and Telephone Corporation) .
Copyright (C) 2001 Baltimore Technologies Ltd.

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. All advertising materials mentioning features or use of this software must display the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED 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 OpenSSL PROJECT OR ITS 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 (c) 2004, Richard Levitte <richard@levitte.org>
Copyright (c) 2007 KISA(Korea Information Security Agency).
Copyright (c) 2002 Bob Beck <beck@openbsd.org>
Copyright (c) 2002 Theo de Raadt
Copyright (c) 2002 Markus Friedl
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 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.

====

hwcryptohook.h


```
/*
 * ModExp / RSA (with/without KM) plugin API
 *
 * The application will load a dynamic library which
 * exports entrypoint(s) defined in this file.
 *
 * This set of entrypoints provides only a multithreaded,
 * synchronous-within-each-thread, facility.
 *
 * This file is Copyright 1998-2000 nCipher Corporation Limited.
 *
 * Redistribution and use in source and binary forms, with opr without
 * modification, are permitted provided that the following conditions
 * are met:
 *
 * 1. Redistributions of source code must retain the 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
 *
 * IN NO EVENT SHALL NCIPHER CORPORATION LIMITED ('NCIPHER') AND/OR
 * ANY OTHER AUTHORS OR DISTRIBUTORS OF THIS FILE BE LIABLE for any
 * damages arising directly or indirectly from this file, its use or
 * this licence. Without prejudice to the generality of the
 * foregoing: all liability shall be excluded for direct, indirect,
 * special, incidental, consequential or other damages or any loss of
 * profits, business, revenue goodwill or anticipated savings;
 * liability shall be excluded even if nCipher or anyone else has been
 * advised of the possibility of damage. In any event, if the
 * exclusion of liability is not effective, the liability of nCipher
 * or any author or distributor shall be limited to the lesser of the
 * price paid and 1,000 pounds sterling. This licence only fails to
 * exclude or limit liability for death or personal injury arising out
 * of negligence, and only to the extent that such an exclusion or
 * limitation is not effective.
 *
 * NCIPHER AND THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ALL
 * AND ANY WARRANTIES (WHETHER EXPRESS OR IMPLIED), including, but not
 * limited to, any implied warranties of merchantability, fitness for
 * a particular purpose, satisfactory quality, and/or non-infringement
 * of any third party rights.
 *
 * US Government use: This software and documentation is Commercial
 * Computer Software and Computer Software Documentation, as defined in
 * sub-paragraphs (a)(1) and (a)(5) of DFAR 252.227-7014, "Rights in
 * Noncommercial Computer Software and Noncommercial Computer Software
 * Documentation." Use, duplication or disclosure by the Government is
 * subject to the terms and conditions specified here.
 *
 * By using or distributing this file you will be accepting these
 * terms and conditions, including the limitation of liability and
 * lack of warranty. If you do not wish to accept these terms and
 * conditions, DO NOT USE THE FILE.
 *
 * *****
 * zlib: 1.2.3
 * *****
 Notices to be included into the product documentation:
 *****

 * Copyright (c) 1997
 * Christian Michelsen Research AS
 * Advanced Computing
 * Fantoftvegen 38, 5036 BERGEN, Norway
 * http://www.cmr.no
 *
```

```
* 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. Christian Michelsen Research AS makes no
* representations about the suitability of this software for any
* purpose. It is provided "as is" without express or implied warranty.
```