

Intel® Data Analytics Acceleration Library (Intel® DAAL) 2019 Release Notes

12 Sep, 2018

Contents

Overview.....	1
What's New in Intel® DAAL 2019.....	2
Deprecation Notes.....	2
System Requirements.....	2
Documentation.....	2
Product Contents.....	3
Technical Support.....	3
License Definitions.....	3
Legal Information.....	3

Overview

This page provides the current Release Notes for Intel® Data Analytics Acceleration Library. The notes are categorized by year, from newest to oldest, with individual releases listed within each year.

Please click on the following links to the online resources and documents to get the latest information about Intel DAAL:

- [Intel® DAAL Product Page](#)
- [Intel® DAAL 2019 System Requirements](#)
- [Intel® DAAL 2019 Installation Guide](#)
- [Intel® DAAL Get Started](#)

This document has been updated to reflect new product functionality and quality enhancements. The document usability and clarity were improved.

Please [register your product](#) using your preferred email address. This helps Intel recognize you as a valued customer in the support forum and ensures that you will be notified of product updates. You can read the [Intel Privacy Policy](#) if you have any questions regarding the use of your email address.

What's New in Intel® DAAL 2019

- Implemented logistic regression classification algorithm.
- Implemented cross-entropy and logistic loss objective functions.
- Added [new distribution model via Java MAVEN](#), which helps JAVA developers to simplify the process of getting and building projects with Intel® DAAL usage.
- Extended traversal API to return additional data from decision tree, decision forest, and gradient boosting models.
- Boosted machine learning and data analytics performance in EM-GMM, sparse SVM training (linear kernel), logit boost training, gradient boosting prediction and others.

Deprecation Notes

Deprecation of the following features:

- 32bit library for Mac OS* is deprecated in this release and will be removed in the next release.

Removal of support for:

- Installation on 32-bit hosts for all types of OS is no longer supported. However, the 32-bit library (for Windows* and Linux*) continues to exist, and can be used on 64-bit hosts.

System Requirements

For information about the Intel® DAAL system requirements, please visit the [Intel® DAAL 2019 System Requirements](#) page.

Documentation

Intel® DAAL documentation including Developer Guide and API Reference are available online at [Intel® Software Documentation Library](#). You can also download it from the [Intel® Software Development Products Registration Center](#) > Product List > Intel® Parallel Studio XE (or Intel® System Studio) Documentation.

Product Contents

Intel® DAAL for Windows, Linux OS, and macOS is provided as a part of Intel® Parallel Studio XE and Intel® System Studio product. It is also available from [free Intel® performance libraries](#) program:

- Installation package only supports 64-bit host system. It includes both the 64-bit and 32-bit target libraries.
- Installation package also provides the online installer (Windows* and Linux* OS) that downloads materials chosen during installation

Technical Support

If you did not register your Intel® software product during installation, please do so now at the [Intel® Software Development Products Registration Center](#). Registration entitles you to free technical support, product updates and upgrades for the duration of the support term.

For technical information about Intel® DAAL, including FAQ's, tips and tricks, and other support information, please visit the Intel® DAAL forum: <https://software.intel.com/en-us/forums/intel-data-analytics-acceleration-library> and browse the Intel® DAAL support page: <https://software.intel.com/en-us/intel-daal-support>

For general information about Intel technical support, product updates, user forums, FAQs, tips and tricks and other support questions, please visit <http://www.intel.com/software/products/support/>.

Note: If your distributor provides technical support for this product, please contact them rather than Intel.

License Definitions

Any software source code included with this product is furnished under a software license and may only be used or copied in accordance with the terms of that license. Please see the [Intel® Software Products End User License Agreement](#) for license definitions and restrictions on the library.

Legal Information

By using this document, in addition to any agreements you have with Intel, you accept the terms set forth below. You may not use or facilitate the use of this document in connection with any infringement or other legal analysis concerning Intel products described herein. You agree to grant Intel a non-exclusive, royalty-free license to any patent claim thereafter drafted which includes subject matter disclosed herein.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS' FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or go to:

<http://www.intel.com/design/literature.htm>.

BlueMoon, BunnyPeople, Celeron, Centrino, Cilk, Flexpipe, Intel, the Intel logo, the Intel Anti-Theft technology logo, Intel AppUp, the Intel AppUp logo, Intel Atom, Intel CoFluent, Intel Core, Intel Inside, the Intel Inside logo, Intel Insider, Intel NetMerge, Intel NetStructure, Intel SingleDriver, Intel SpeedStep, Intel Sponsors of Tomorrow., the Intel Sponsors of Tomorrow. logo, Intel vPro, Intel Xeon Phi, Intel XScale, InTru, the InTru logo, the InTru Inside logo, InTru soundmark, Iris, Itanium, Look Inside, the Look Inside logo, MCS, MMX, Pentium, Puma, RealSense, skool, the skool logo, SMARTi, Sound Mark, Stay With It, the Engineering Stay With It logo, The Creators Project, The Journey Inside, Thunderbolt, the Thunderbolt logo, Ultrabook, VTune, Xeon, X-GOLD and XMM are trademarks of Intel Corporation in the U.S. and/or other countries.

*Other names and brands may be claimed as the property of others.
Microsoft, Windows, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.
Java is a registered trademark of Oracle and/or its affiliates.

Copyright (C) 2011-2018, Intel Corporation. All rights reserved.

Optimization Notice

Intel's compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel. Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice.

Notice revision #20110804