



oneMKL Interface Renaming RFC

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2024-09-24

oneMKL Interface renaming RFC

- Follow up from previous UXL open-source WG meeting on June 25
- It was decided to not go with the plan of splitting per domain
 - Renaming is deemed to be a simpler solution to clarify the difference with the Intel oneMKL product
- RFC for renaming: <https://github.com/oneapi-src/oneMKL/pull/564>

Suggested new name

- **oneMath**
 - C++ namespace **oneapi::math**
 - CMake namespace **ONEMATH**
- Other suggestions are welcomed

Renaming plan

1. We submit a PR to rename "oneMKL" in the oneAPI specification
2. We submit a PR to rename the occurrences of "oneMKL" and "mkl" in oneMKL Interface
3. Once the 2 PRs are approved, we transfer oneMKL Interface to the uxfoundation organization with the new name
4. The 2 PRs are merged

Renaming occurrences of mkl

- The namespace *oneapi::mkl* will be deprecated and aliased to *oneapi::math*
- The following headers will be deprecated and include the new equivalent header:
 - *include/oneapi/*
 - *mkl.hpp* -> *math.hpp*
 - *mkl/* -> *math/*
 - *dft.hpp*
 - *lapack.hpp*
 - *rng.hpp*
 - *rng/device.hpp*
 - *sparse_blas.hpp*
- Other headers will move without keeping a deprecated version. Projects outside of oneMKL should not include these headers

CMake changes

- CMake namespaces for the exported and installed targets (*ONEMKL::* and *MKL::*) will be renamed to *ONEMATH::*
 - Not aware of a solution to deprecate the CMake namespaces
- CMake targets *onemkl* and *onemkl_<domain>_<backend>* will be deprecated and "aliased" to the new targets

Open questions

- Should the specification and the existing implementation have different names?
 - Using the same name favors the oneMKL Interface implementation. Should the specification encourage for more implementations?
 - Introducing more names risks to increase the confusion.