

# oneMKL Technical Advisory Board

Session 7

September 9, 2020

# Agenda

- Welcoming remarks – 5 minutes
- Updates from last meeting – 5 minutes
- Overall oneAPI specification and process going forward - Robert Cohn (15 minutes)
- Wrap-up and next steps – 5 minutes

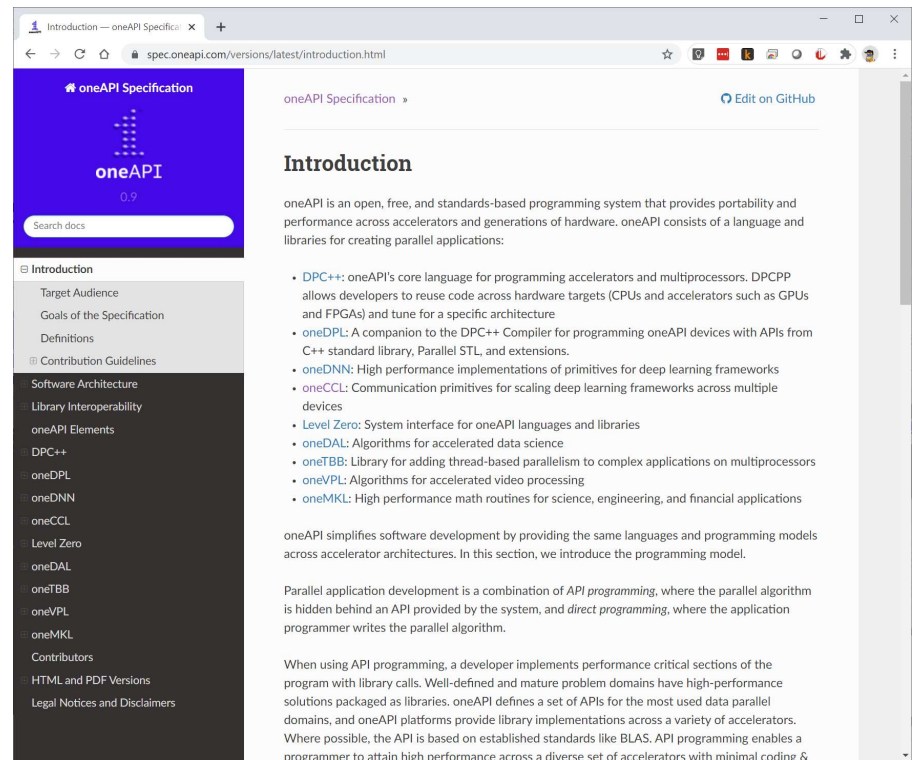
# Updates from last meeting

- 4-week meeting frequency:
  - Cancelled every other meeting
  - Please verify no meeting for September 23 on your calendar
  - If there is, we'll end this series and start new meeting series
- Changes for oneMKL specification v. 1.0 available on public repo (<https://github.com/oneapi-src/oneAPI-spec>), but specification not yet released
- Enabling RNG domain in open source oneMKL interfaces is in progress (<https://github.com/oneapi-src/oneMKL>)

Overall oneAPI specification and  
process going forward

# oneAPI Specification

- Documents design for stakeholders
- 9 elements
- HTML: <https://spec.oneapi.com>
- Source: <https://github.com/oneapi-src/oneapi-spec>



# Relationship of Specification to Product

- First product release of oneAPI implements oneAPI spec 1.0
- oneAPI products and open source are superset of spec
  - openMP, MPI, ... not described by spec
  - Spec element may provide API that are not included in spec
    - Get feedback before standardization
    - Not appropriate for standardization: tied to implementation

# Roadmap

- Roadmap published in github repo
- oneAPI spec 1.0 published by 10/2020
  - Followed by editing updates, but no API changes
- Many new features/enhanced planned for oneAPI
  - Starting work on oneAPI 1.1
  - Provisional 1.1 specifications published quarterly
  - Review in TABS and with stakeholders
  - Expecting approval/publishing 10/2021

# Governance

- Published in github repo
- Core team for each element. Core team writes specification
- Central core team with representatives of each element
- Contribution open to anyone. TAB, Github issues & PR's
- Core team membership currently all Intel, but open to anyone based on history of contribution, subject to approval of core team



# Getting Involved

- Participate in TAB
- Github project <https://github.com/oneapi-src/oneapi-spec>
  - View latest draft
  - Notifications of new releases by becoming release-only watcher in github
  - Questions, suggestions, proposals
- Let us know if you would like a blog post/article you write to be posted on [oneapi.com](https://oneapi.com)

# Next Steps

- Focuses for next meeting(s):
  - Sparse linear algebra
  - Discrete Fourier transforms
  - Vector math
  - Any topics from oneMKL TAB members?

Version	Date	oneAPI Notes	oneMKL Notes
<a href="#">0.8.5</a>	26 June 2020	80% content	Finalize BLAS and LAPACK domains
<a href="#">0.9.0</a>	30 Jul 2020	~100% content	Finalize FFT, sparse BLAS, RNG, and VM domains
<a href="#">1.0.0</a>	By Oct 2020	Gold Release	Minor cleanup

# Resources

- oneAPI Main Page: <https://www.oneapi.com/>
- Latest release of oneMKL Spec (currently v. 0.9):  
<https://spec.oneapi.com/versions/latest/elements/oneMKL/source/index.html>
- GitHub for oneAPI Spec: <https://github.com/oneapi-src/oneAPI-spec>
- GitHub for oneAPI TAB: <https://github.com/oneapi-src/oneAPI-tab>
- Latest build of oneAPI Spec: <http://staging.spec.oneapi.com.s3-website-us-west-2.amazonaws.com/exclude/ci/branches/refs/heads/master/versions/latest/index.html>
- GitHub for open source oneMKL interfaces (currently BLAS domain):  
<https://github.com/oneapi-src/oneMKL>