



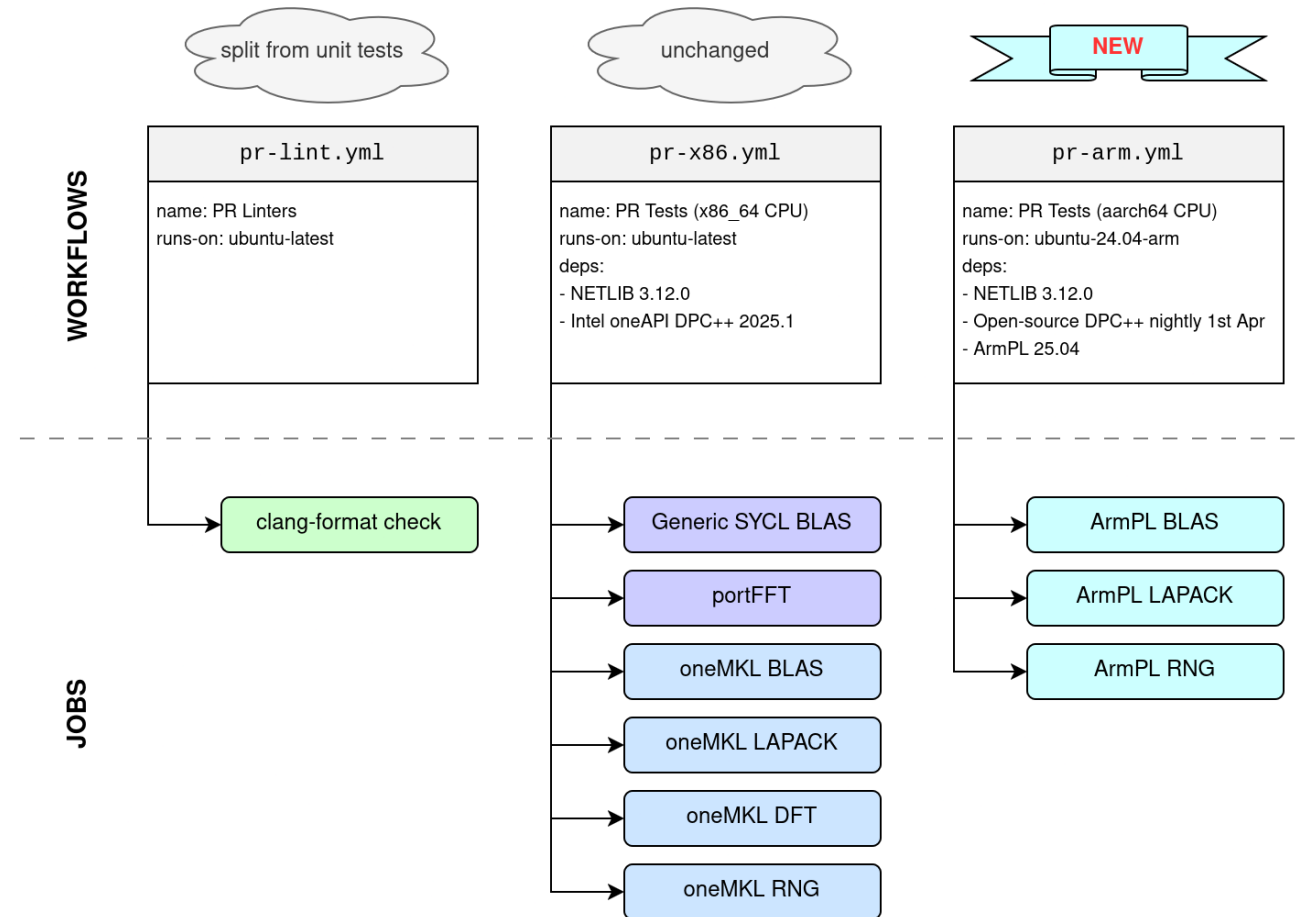
oneMath Continuous Integration updates

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Recent changes to oneMath CI

- [oneMath#668](#) added CI jobs running on aarch64 CPU
- PR workflows now split into 3 files
- aarch64 CI set up identically to x86_64
 - Run domain-specific unit tests for each backend
 - Path filter skips jobs for domains unaffected by the PR
- The only differences:
 - No binary DPC++ releases exist for aarch64 hosts, so CI needs to build from source
→ expensive (1h30min), but cached
 - Additional dependency: ArmPL
- Caveat: the ubuntu-24.04-arm GitHub runner is a [beta version](#)



Potential future improvements

External work needed:

- Find a solution to distribute open-source DPC++ release **binaries for aarch64** to avoid building it in CI
- Obtain dedicated runners
 - CPU runners for full control over CI
 - **GPU runners** to extend testing to GPU backends

Possible today:

- Extend testing to all **backends and domains**
 - Currently not tested: SPARSE_BLAS domain, OpenRNG backend (both archs), NETLIB backend (both archs), generic backends on aarch64 CPU
- Extend testing to other supported **compilers**
 - AdaptiveCpp
- Extend testing to **Windows**
- Split out dependency builds from UT jobs
 - Currently in case of a cache miss, dependencies are rebuilt multiple times, once in each job



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