Belfast 2019 LEWG Summary

This paper is a belated summary of the activities of the Library Evolution Working Group during the recent WG21 meeting in Belfast.

In brief: we discussed and provided initial resolution to all NB comments that needed LEWG oversight. Specifically we saw 19 NB comments with papers, 100 NB comments without papers (including duplicates), 3 policy papers about library design and LEWG processes.

We also spent the morning on Thursday reviewing papers and presentations relating to P0443 (Executors). The result of that discussion was a non-binding poll: LEWG intends to review P0443 in Prague with the hope of voting it forward (as opposed to the current habit of reviewing the design, providing some feedback, and letting SG1 continue work). SG1 and P0443 authors especially are encouraged to produce design-discussion, usage examples, and tutorial material to help make the discussion in Prague easy to follow. LEWG participants are encouraged to do the homework and read up on any such material.

There are approximately 70 papers that are being tracked that have not been discussed by either LEWG or LEWGI. We hope that we can make significant progress on those papers in Prague, beginning the major work for C++23.

Chair Tenure

The summer 2021 is likely my last meeting as LEWG chair, and I anticipate missing the winter 2021 meeting for personal reasons. We will begin the process of trying new potential chairs over the next few meetings. If you would like to be considered for this position, please email me directly.

Acknowledgements

Thank you to Jonathan Coe for note-taking almost the entirety of this meeting. Additional thanks to everyone else that was forced into service the rest of the time.

My most profound thanks to everyone that participated in the discussions during the week. I continue to be deeply pleased with the quality and professionalism of our design discussions.

Contention

There are three NB comments that were discussed (repeatedly) during the Belfast meeting that have been found to be contentious and will be re-discussed in Prague.

- US227 - Add "z" format modifier to avoid sign for zero-display numbers
- US195 - Remove concept "boolean" and use convertible_to<bool> instead, which is reopened by the inclusion of P1964
- DE002 - Rename make_unique/shared_default_init to make_unique/shared_nonvalue_init

Commitments/Homework

A number of people volunteered to write follow-up papers or otherwise help make progress on some in-flight proposals during the week. The following is a listing of those promises, as well as promises from previous rounds that haven't materialized.

- Zach Laine - Follow up P1655R0 with proposed wording for a new SD describing LEWG design policy.
- Matthias Kretz, David Hollman, Nevin Lieber - Propose policy describing ranges x parallel algorithms - we'd like to focus on ranges algorithms going forward, but parallel algorithms only exist in the legacy versions at this time.

A Note On Forwarded Proposals

Usually this mailing includes a detailed list of things that were forwarded, considered, or not forwarded. Due to the volume of papers and NB comments presented over the course of the week and the double/triple counting involved (reviewing a paper that resolves two NB comments, for instance), that summary is not being provided in this summary. We'll be back to normal paper-processing next time.