Expanding the Rights in SD-8

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Change History

R1
Incorporate the changes discussed in LEWG in Belfast:
   • Change “namespace std” to “namespace std and sub-namespaces”
   • Add inline variables to the list of entities

Introduction
The rights enumerated in the 2018-08-02 version of SD-8 (Standard Library Compatibility) are a great start, but are not sufficient. This proposal expands upon those rights.

Motivation and Scope
The rights enumerated in “Rights the Standard Library Reserves for Itself” is a great start, but is not sufficient to cover what we already assume. Here is an attempt to expand on those rights.
Add new names to namespace std

We own more than one namespace, and we should reserve the right to add names to any of those namespaces and to any entity within those namespaces.

Impact on the Standard
No direct impact.

Design Decisions
Entities within reserved namespaces are things that are in the domain of the standard library.

Technical Specifications
Replace the first three bullet items with:

- Add new names to namespace std, any namespace reserved for future standardization as per [namespace.future], and any sub-namespaces of those namespaces
- Add new names to any entity within any reserved namespace, including but not limited to
  - Functions (this includes new member functions and overloads to existing functions)
  - Enumerations
  - Namespaces
  - Aliases (using, typedef, etc.)
  - Classes (struct/class/union)
  - Concepts
  - Inline variables

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References
SD-8: Standard Library Compatibility