

Library Working Group

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Overview

- What the group is working on
- Open Issues from last time
- Progress since last meeting (summary)
- Presentations
- Recommended Actions & Work Plan

What the Group is Working On

- Producing documents to serve as proposals to X3J16
- Goal: at least as complete as Template and Exception proposals
- Current focus:

18.1 *Language Support*
18.2 *Input/Output*
18.3 *ANSI C*
18.4 *String*

... the universe of reusable components

- Timeline:
 "final draft"
 Proposal for vote

Open Issues From Last Time

- Language Support
 - Predefined Exceptions*
- Input/Output
 - International Character Handling*
 - Error handling*
- ANSI C Library
 - Reference/Include C standard*
 - Mixed C/C++ Interactions:*
 - streams & stdio
 - new/delete & malloc/free/realloc
 - exceptions & signals
- String
 - Exception specifications*
 - Substrings and temporaries*
- Other
 - International character handling*
 - Naming:*
 - header "file" names
 - class names (vs. nested classes)
 - use of typedefs
 - Description of Library "conformance"*

Progress Since the Last Meeting

□ Documents

Language Support revised (after mailing)

Standard Exceptions proposed (91-0116)

Input/output revised (91-0117)

ANSI C issues summarized (91-0105)

String proposal revised (91-0078)

Review of Library submissions (91-0111)

□ e-mail

Standard exceptions:

- Common base class `xmsg`
- To define “undefined” behavior (e.g. operator `new`)
- To report assertion violations
- From Jerry Schwarz
- Comments from Doug Lea and Jon Shopiro

Strings:

- Comments on constructing, assigning, and appending
- From Uwe Steinmueller, Siemens-Nixdorf
- No comments

Container classes proposed:

- “A Smalltalk-like type hierarchy”
- From Uwe Steinmueller and Alexander Zitzwitz, Siemens-Nixdorf
- Comment by James Coggins, UNC Chapel Hill

Presentations

- Strings *Aron Insinga*
Technical Session Tuesday evening

Recommended Actions

- Comment on evolving proposals
- Join in discussions ("live" & e-mail)
- Trial implementations (to "standardize existing practice")

Work Plan

- Decide error/exception approach
- Proposal for 18.1, Language Support
- Proposal for 18.2, Input/Output
- Define C/C++ library interaction
- Proposal for 18.3, ANSI C Library
- Proposal for 18.4, String classes
- Start on Rationale sections
- Decide container classes approach