Fermilab U.S. DEPARTMENT OF ENERGY Office of Science

Breaking changes for *art* 2.08

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art stakeholders meeting

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Breaking changes for *art* 2.08

`cetlib`

- `cetlib/detail/metaprogramming.h` → `cetlib/metaprogramming.h` (and corresponding namespace changes)

`messagefacility`

- Configuration validation implemented—i.e. any mis-specified parameters will result in an exception throw that cannot be caught by the user.
- Proposed:
  - Remove `'messagefacility.generate_preconfiguration_message'` parameter.
  - Remove `'placeholder'` parameter for destinations
  - Remove `'output'` and `'extension'` parameters for file-type destinations—just use `'filename'`.

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`messagefacility` (cont.)

- Proposed:
  - Remove `message.destinations.<dest name>.useMilliseconds`, duplicated by `message.destinations.<dest name>.format.useMilliseconds`
  - Remove `message.destinations.<dest name>.noLineBreaks`, duplicated by `message.destinations.<dest name>.format.noLineBreaks`
  - Move `message.destinations.<dest name>.lineLength` to `message.destinations.<dest name>.format.lineLength`

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canvas

- `BranchID` no longer used in *art*, except for backwards compatibility.
- `ProductID` schema has changed—we guarantee the ability to read older files.
- `PassID` member has been removed from `ProcessConfiguration`
- `BranchDescription::branchID()` replaced with `BranchDescription::productID()`
- `Parentage` schema has changed from `std::vector<BranchID>` to `std::vector<ProductID>`
- Remove `TestHelper` facility
- Proposed:
  - Remove `BranchDescription::MatchMode`

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`art`

- File format change: **9 → 10**
- Renamed `get_BranchDescription` to `get_ProductDescription`
- Removed `Event::branchIDToProductID` (no longer necessary)
- Proposed:
  - Remove `art::JobMode`
  - Removing unconditional loading of ROOT libraries when executing `art` exec.
  - Remove `RootInput fileMatchMode` configuration parameter
  - Change severity level of logged *art* summary message from “severe” to “warning”: this means that the messages can be suppressed via configuration of a given destination
  - Remove unused `HRRealTime` facility
  - Remove unused `math_private` facilities (allow retrievals of integers from floating-point values)