



## *art news*

17 September 2019

*art* stakeholders meeting



## ROOT 6.16 vs. 6.18

- ROOT 6.16/00, 6.18/00, and 6.18/02 have deficiencies in supporting I/O conversions from `some_type<double>` on disk to `some_type<Double32_t>` in memory.
  - <https://sft.its.cern.ch/jira/browse/ROOT-10271>
- We are preparing the usual set of releases to support ROOT 6.18/04, which will include a fix to the aforementioned bug.
  - The fix only addresses conversions of templates where *an exposed template argument* has changed from `double` → `Double32_t`. Solution is to remove the I/O rule.
  - For cases where more complicated I/O rules involving `double` → `Double32_t` must be used, there is still not a general solution. Consequently, objects of such types cannot be reliably read from older files.

# Python 3

- Python 2 end-of-life is January 1, 2020:
  - <https://pythonclock.org>
- *art* 3.02 and newer have supported Python 3 since late January 2019
- Please test Python 3-qualified of *art* as soon as you can (e.g.)
  - `./pullProducts -r <product dir> slf7 art-v3_03_01 e19-py3 prof`
  - `setup art v3_03_01 -q +e19:+prof:+py3`
- **The SciSoft team does not distribute Python 3 (qualified) builds for SLF6.**
  - Technical limitations here. Please consider moving off of SLF6.

## Preview of *art* 3.04

- Some bug fixes in *art* and *art\_root\_io*.
- Service-configuration pruning.
  - If users specify which services will be used by a given module/service, the framework will be able to prune the configurations of services that are not used.

## Preview of *art* 3.04

- Some bug fixes in *art* and *art\_root\_io*.
- Service-configuration pruning.
  - If users specify which services will be used by a given module/service, the framework will be able to prune the configurations of services that are not used.

```
using Services = ServiceHandlesFor<art::FileCatalogMetadata>;

explicit SAMMetadataTest(Parameters const& p) : EDAnalyzer{p}
{
    Services::get<art::FileCatalogMetadata>()->addMetadataString(key, value);
}
```

## Preview of *art* 3.04

- Some bug fixes in *art* and *art\_root\_io*.
- Service-configuration pruning.
  - If users specify which services will be used by a given module/service, the framework will be able to prune the configurations of services that are not used.

```
using Services = ServiceHandlesFor<art::FileCatalogMetadata>;  
  
explicit SAMMetadataTest(Parameters const& p) : EDAnalyzer{p}  
{  
    Services::get<art::FileCatalogMetadata>()->addMetadataString(key, value);  
}
```

- Service handles are retrieved through the Services type.
- Allows restriction on where service handles can be created.
  - Bare service handle construction (e.g. `art::ServiceHandle<MyService> sh;`) will be deprecated in *art* 3.04 and removed in *art* 3.05.

# Preview of *art* 3.04

- Some bug fixes in *art* and *art\_root\_io*.
- Service-configuration pruning.

- If users be able

```
using Service
explicit S
{
  Services
}
```

```
module_type: SAMMetadataTest (or "critic/test/art/SAMMetadataTest")

provider: art
type    : analyzer
source  : /home/knoepfel/scratch/art-devel/srcs/critic/critic/test/art/
library : /scratch/knoepfel/art-devel/e19_debug/build_slf7.x86_64/criti

Requires services providing the following C++ types
-----
art::FileCatalogMetadata

Allowed configuration
-----

## Any parameters prefaced with '#' are optional.

<module label>: {
```

network will

- Service
- Allows
- Bare depr

;) will be

# macOS support

- SciSoft OS support survey sent in late October 2018.
- We have finished analyzing the results and our findings can be found here:
  - <http://rpubs.com/knoepfel/471661>
- Bottom line:
  - *In light of the large effort required, the small number of macOS users served, and the reduced effort available, the SciSoft team plans to shed support for macOS. No imminent actions will be taken regarding these findings. Discussions, however, are underway to determine a path forward for those users that rely on macOS.*