

## cet-is-public - Support #21500

### NOvA Request for new nutools release

12/07/2018 01:22 PM - Thomas Warburton

<b>Status:</b>	Closed	<b>Start date:</b>	02/04/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Lynn Garren	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	20.00 hours
<b>Target version:</b>			
<b>Description</b>			
Hi,			
I'm unsure if some of these requests will get rolled into other planned requests, however I will articulate the NOvA request in full so that nothing is missed.			
We would like to request a new nutools version with the following;			
<ul style="list-style-type: none"><li>• Latest release in the art2 branch -&gt; v2.12.</li><li>• Latest release of Genie - v3.0.2 with reweighting package.</li><li>• Latest release of GEANT4 - v4_10_4_p02 (the most up-to-date version as of May 25).</li><li>• Latest version of Tensorflow - v1.12 (or at least newer than v1.7).</li></ul>			
Ideally we would have this available before the end of the year so that we can begin to make validation files over the holiday break.			
Thanks in advance, Karl			
<b>Subtasks:</b>			
Support # 21833: geant4 v4_10_4_p02 with patch for NOvA			<b>Closed</b>

#### History

##### #1 - 12/10/2018 10:25 AM - Kyle Knoepfel

- Status changed from New to Accepted

This issue is blocked until there is an art 2.12 series.

##### #2 - 12/10/2018 10:26 AM - Lynn Garren

We are also still waiting for the genie tag.

##### #3 - 12/11/2018 05:07 PM - Thomas Warburton

Hi Lynn,

We received an email today from Robert saying that they have cut a new GENIE tag yesterday.

Cheers,  
Karl

##### #4 - 01/29/2019 10:52 AM - Thomas Warburton

Hi Lynn,

Things have moved quite quickly in the background on NOvA in the last week, and the nutools version is now one of the main schedule drivers.

We would like to request a new tag without an updated tensor flow (to be revisited later).

There is also a new version of PPFX that Leo is currently working on. We would also like to include that once it is available.

If it works for you, Leo and I would like to have a chat about cutting the new nutools release at some time this afternoon.

Cheers,  
Karl

**#5 - 01/29/2019 03:23 PM - Lynn Garren**

- Estimated time set to 20.00 h
- Assignee set to Lynn Garren
- Status changed from Accepted to Assigned

After a discussion this afternoon, a number of fixes have been made to ppfx and v02\_04 is now tagged.

**#6 - 01/30/2019 04:23 AM - Matthew Strait**

Hi Lynn,

We'd like to apply this patch to Geant for our build:

[https://bugzilla-geant4.kek.jp/show\\_bug.cgi?id=2121](https://bugzilla-geant4.kek.jp/show_bug.cgi?id=2121)

This is approved by Alex H and the DetSim group.

It's against HEAD, but **should** apply cleanly to 10\_4\_p02 or anything else recent. Let me know if there are any difficulties.

Thanks,  
Matt

**#7 - 01/30/2019 12:00 PM - Lynn Garren**

The request for a new geant4 release may considerably delay nutools and should be made as a separate request. Would you please make a new ticket and also tell us why you need the patch? You can link the request to this ticket. Thank you

**#8 - 02/01/2019 04:27 PM - Alexander Himmel**

Hmmm... I think I got the impression we were requesting a new geant4 build as part of the nutools request already, so a patch would be a relatively small perturbation. Can you be a little more specific about what "considerable" means? We're willing to wait a couple days, but if it's going to be much longer than that we may need to pass.

As to why, we have a systematic on muon range whose purpose is to cover a mistake in the way Geant4 is modeling our muon catcher, which is fixed by this patch. We'd rather just fix the mistake and remove the systematic if we can.

**#9 - 02/04/2019 11:55 AM - Lynn Garren**

Actually, there is already a geant4 v4\_10\_4\_p02a release. It is part of the mu v2\_12\_00 distribution.

**#10 - 02/04/2019 01:29 PM - Lynn Garren**

- Start date changed from 12/07/2018 to 02/04/2019

- Due date set to 02/04/2019

due to changes in a related task: [#21833](#)

**#11 - 02/05/2019 04:03 PM - Lynn Garren**

- nutools v2\_28\_00 tagged and ready to build
- geant4 v4\_10\_4\_p02b built and ready
- ppfx v02\_04 tagged and ready to build
- genie v3\_00\_02 ready to build for e15
- ifdh\_art v2\_07\_01 tagged and ready to build

Currently testing the nu distribution build to make sure it's ready to build. Tensorflow will not be part of this distribution.

**#12 - 02/05/2019 07:58 PM - Lynn Garren**

- Status changed from Assigned to Resolved

An e15 build of nutools v2\_28\_00 is now available. See [http://scisoft.fnal.gov/scisoft/bundles/nu/v2\\_28\\_00/nu-v2\\_28\\_00.html](http://scisoft.fnal.gov/scisoft/bundles/nu/v2_28_00/nu-v2_28_00.html)

**#13 - 02/06/2019 12:53 PM - Alexander Himmel**

FYI -- with the new nutools build we were able to check Geant and it shows the intended effect.

**#14 - 02/07/2019 03:11 PM - Lynn Garren**

- Status changed from Resolved to Closed