

## CODE-2013-169 - pysysdevel, 0.5.2

Date started: 03/19/2013 Date Completed: 04/04/2013

Section: Copyright Submission - Completed

Page: General Information

### 1. Submitter:

User	First Name	Last Name	Email
181006	Sean	Brennan	brennan@lanl.gov

2. I understand that no classified information can be included in this submittal. *For questions regarding Derivative Classifiers (DCs) please see: [Security Protection Information](#).*

By checking the box below I certify that the copyright abstract and attachments were reviewed by a Derivative Classifier (DC). *The DC review is required for the abstract and other information entered into the record. It is NOT for the software code.*

True

### 3. Select the Derivative Classifier (DC) Reviewer.

User	First Name	Last Name	Email
180367	Richard	Kippen	mkippen@lanl.gov

### 4. DC Review Date

3/27/2013

Page: Software Name and Version

### 1. Please enter the software / schematic name, include version number (i.e. Software Name, Version X).

pysysdevel, 0.5.2

### 2. Version Date

3/26/2013

3. I consider this copyright disclosure to be a subject copyright from work performed under DOE's contract with Los Alamos National Security. For questions on whether a copyright is my personal property and not a subject copyright, please contact Kathleen McDonald (7-5844) or Christine Ramos (5-6846).

True

Page: Authors

### 1. Assign Primary Author. The Primary Author is the person responsible for the CODE.

User	First Name	Last Name	Email
181006	Sean	Brennan	brennan@lanl.gov

### 2. Assign Primary Author's Responsible Line Manager. NOTE: Responsible Line Manager cannot be an Author.

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## CODE-2013-169 - pysysdevel, 0.5.2

User	First Name	Last Name	Email
183051	Dongming	Cai	dmc@lanl.gov

### 3. Are there additional authors?

No

#### 3.1. Are the additional authors LANS or non-LANS employees at the time of copyright creation/development?

**3.1.1. Assign Additional LANS Authors. (List all LANS authors who contributed). NOTE: Do not include the primary author in this list.**

**3.1.2. Assign Additional External Authors. (List all non-LANS authors who contributed).**

### 4. Assign Delegates

### 5. Assign the Software Steward - person responsible for maintaining the code. NOTE: Steward may be an author.

User	First Name	Last Name	Email
181006	Sean	Brennan	brennan@lanl.gov

### 6. Assign the Steward's Responsible Line Manager (RLM).

User	First Name	Last Name	Email
183051	Dongming	Cai	dmc@lanl.gov

Page: Software Details

**1. Select the type of copyrightable material you are disclosing. (Select only one. If you have more than one copyrightable work complete this submission and then create another separate record using the copy an existing code selection under Copy a Workflow when you Initiate a CODE). For questions call 665-6846.**

Software

#### 1.1. Explain Other

**1.2. If the copyrightable work is Artwork, Audiovisual Work, Book, Mask Work, or Schematics please list the LA-CP for each item.**

**2. Detailed description of the copyrightable work - (For software and firmware be sure to include a description of the functions, capabilities, methods, etc. of what you are disclosing).**

pysysdevel is a Python package that assists software development in three related areas: model development, data visualization, and collaboration & distribution. This package facilitates multi-model simulation development by implementing a generic Model-View-Controller interface. The View portion of this interface handles data

visualization by unifying both web-based and desktop UI tools. For package distribution, pysysdevel extends the distutils package to handle external libraries and application freezing.

**3. Include any references to any relevant Los Alamos publications (descriptions, manuals,etc.). Give URL information if posted on LANL web site.**

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4. Please provide a list of keywords that define your software (i.e. parallel processing, supercomputing, feature extraction, network security).

Build tools  
Scientific modeling

5. Does the code leverage any unique or novel algorithms?

No

Page: Software Release and Distribution

1. Have you released the code outside of LANL (in source or executable form)?

No

1.1. If yes, to whom?

1.2. Date of release:

2. Do you intend to release the source code outside of LANL? (i.e., to other labs, commercially, or in the open source?)

Yes

2.1. For release outside of LANL, check all that apply

Open Source

2.1.1. If you need to release the software in the open source, under which license would you like to release it?

Other OSS License

2.1.1.1. Explain other OSS license

Mozilla Public License 2.0 (MPL-2.0)

<http://opensource.org/licenses/MPL-2.0>  
see [http://en.wikipedia.org/wiki/Mozilla\\_Public\\_License](http://en.wikipedia.org/wiki/Mozilla_Public_License) for a summary

2.1.2. Explain other

3. Do you intend to release the executable/binary code outside of LANL? (i.e., to other labs, commercially, or in the open source?)

N/A - don't have executable/binary code

3.1. If yes to above, do you intend to control distribution to the executable/binary version of the software?

Page: 3rd party Software

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## CODE-2013-169 - pysysdevel, 0.5.2

1. Are there any contributions (i.e., lines of code) in this software that were written by individuals other than the authors previously referenced? (i.e., other laboratory authors, non-laboratory authors from academic institutions, contributors to open source projects, lines of code previously published by others in textbooks, etc.)

No

1.1. List the names of the 3rd-party authored software above.

2. Does your software link to another piece of software?

Yes

2.1. If yes, please identify the code below, along with the owner of that software. Please also provide a copy of the license to that linked software

As a Python package, this software depends on both the Python interpreter and the Python Standard Library to run. These are distributed under the OSI-approved Python License (<http://opensource.org/licenses/Python-2.0>).

NumPy, a separate Python package, is also a dependency and released under a BSD-style license (<http://docs.scipy.org/doc/numpy/license.html>).

### Page: Current Software Usage

1. Is your software currently being used?

Yes

2. For what mission/purpose was the software authored?

LANL LDRD-DR: Integrated Modeling of Perturbations in Atmospheres for Conjunction Tracking (IMPACT)

Assists in joining the multiple Python model implementations of this project into a single system.

3. In addition to the intended purpose of the software, please describe any other applications/uses for the software below.

This is a generic convenience tool that can be applied to assist building other simulation systems.

4. Is there a User Training Guide or Installation Instructions with "Help" File?

No

4.1. Please upload file(s).

5. Does this software support parallel processing?

Yes

Owner/Username	Annotation Text	Date Created
181006 - Brennan, Sean	pysysdevel can build in parallel if a particular parallel processing model (pp) is present. It does not, on its own provide any parallel processing mechanisms.	03/27/2013

### Page: Software Requirements

1. What are the minimum software requirements to use this software?

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## CODE-2013-169 - pysysdevel, 0.5.2

Python 2.4 or greater  
NumPy

### 2. What are the minimum hardware requirements to use this software?

None

### 3. If software, what type of platform(s) does it run on?

x86  
x86\_64

#### 3.1. Operating system:

Windows  
OSX  
Linux

#### 3.2. Programming language:

Python

#### 3.3. Is this software code compiled?

No

##### 3.3.1. What is the name of the compiler (Name, version number)? Please list URL if applicable.

### 4. Identify new unique processor requirements needed to use this software.

None

### 5. Does it run on a single computer, cluster or both?

Single computer

Page: Funding

### 1. Was the software funded by any of the following? Select all that apply.

Laboratory-Directed Research and Development (LDRD)

#### 1.1. If funded by Cooperative Research And Development Agreement (CRADA), User Facility Agreement (UFA) or Work-for-Others Non-Federal Entities Agreement (NFE), please list the Agreement Number.

##### 1.1.1. Please list the agreement's Company Sponsor or Participant.

#### 1.2. If funded by Laboratory-Directed Research and Development (LDRD), please list the LDRD Project Number.

20120036DR

#### 1.3. If other, please explain.

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## CODE-2013-169 - pysysdevel, 0.5.2

1.4. Enter program code(s). NOTE: This is for reporting purposes only - Nothing will be charged. Program codes may be active or inactive.

FY: 2012 FullCase:XW13MODL0000 Title:MODELING EFFORT B&R Number:YN0100000 Status:A

1.5. In the case of multiple funding sources identify which of those is most substantial.

Laboratory-Directed Research and Development (LDRD)

2. To the best of your knowledge, is this software covered by an International Treaty or Agreement of the United States government?

No

2.1. If yes, list agreement or treaty number.

### Page: Funding Program Contact Information

1. Please provide the name of the funding program (e.g. ASC, DHS, LDRD, NIH, OASCR).

LDRD

2. Please provide the non-LANL program manager's name for the program listed in #1.

Bill Priedhorsky

3. Please provide the non-LANL program manager's title.

Program Director

4. Please provide the non-LANL program manager's mailing address.

MS M708

5. Please provide the non-LANL program manager's e-mail address:

wpriedhorsky@lanl.gov

6. Please provide the non-LANL program manager's phone number:

667-5204

### Page: Documentation and Final Thoughts

1. Please provide all documentation that you have regarding this software, including but not limited to external copyright licenses, user manual, help file, and screen shots.

2. Please add any additional comments relevant to this copyrightable material.

Submitted by

Submitted date

181006 - Brennan, Sean

03/28/2013

Section: Line Manager Approval - Completed

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Approved by	Approved date
183051 - Cai, Dongming	03/28/2013

Section: TT Completeness Review - Completed

Approved by	Approved date
118284 - Ramos, Christine	03/29/2013

Section: Software Distribution Review - Completed

Page: Distribution Review

## 1. What is the final recommended distribution type (TMT4)?

Copyright assertion required

### 1.1. How is it controlled? (Select all that apply)

### 1.2. Type of copyright assertion (Note: if more than one apply create new record using copy function)

OSS

#### 1.2.1. OSS license type

Mozilla Public License 2.0

## 2. Assign TMT

TMT-4

## 3. TMT-1 Specialist

## 4. TMT-2 Specialist

## 5. TMT-3 Specialist

## 6. TMT-4 Specialist

User	First Name	Last Name	Email
118284	Christine	Ramos	ctramos@lanl.gov

## 7. Enter program code/B&R and TMT distribution decision for SAFE-1 gate.

B&R Code: YN0100000  
Open Source: YES  
Publicly Available: NO

## 8. Enable export control gate?

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Yes

Submitted by

Submitted date

118284 - Ramos, Christine

03/29/2013

Section: Export Control & Classification Reviews - Completed

Page: SAFE-1 Review

### 1. LACC number (auto assigned)

LA-CC-13-035

### 2. Please indicate classification

Unclassified, no UCN

### 3. Is this subject to export control?

Maybe

#### 3.1. Yes - please select appropriate export control category.

##### 3.1.1. Export Control Statement - Department of Commerce (ECCN)

This software is subject to export control under Department of Commerce's Export Administration Regulations (EAR) under the Export Control Classification Number (ECCN) of (ECCN from #6). If you want to export the software or share the code with a foreign national in the United States, please contact Export Control (SAFE-3) to obtain the appropriate license.

##### 3.1.2. Export Control Statement - Department of State (ITAR)

This software is subject to export control under Department of State's International Traffic in Arms Regulations (ITAR), Category (ITAR Category from #7). If you want to export the software or share the code with a foreign national in the United States, please contact Export Control (SAFE-3) to obtain the appropriate license.

##### 3.1.3. Export Control Statement - 10 CFR 110 (NRC)

This software is subject to export control under Nuclear Regulatory Commission (NRC) regulations under 10 CFR Part 110. If you want to export the software or share the code with a foreign national in the United States, please contact Export Control (SAFE-3) to obtain the appropriate authorization.

##### 3.1.4. Export Control Statement - 10 CFR 810 (DOE)

This software is subject to export control under Department of Energy (DOE) regulations under 10 CFR Part 810. If you want to export the software or share the code with a foreign national in the United States, please contact Export Control (SAFE-3) to obtain the appropriate authorization.

#### 3.2. Maybe - Export Control Statement for Open Source

This software is to be released as open source, which requires review and approval by the appropriate DOE Program Office. To facilitate their review, we have determined that if DOE declines to release this software as publicly available open source, it would be subject to export control under Department of Commerce regulations, and classified as ECCN (Export Control Classification Number) (ECCN from #6). If released as open source, the software will be publicly available and not subject to export control. Until the DOE approval is obtained, the software should be treated as export controlled. DOE reserves the right to release or deny release of the software as open source.

#### 3.3. No - Permitted Use/Publicly Available

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## CODE-2013-169 - pysysdevel, 0.5.2

This software is to be made publicly available, which removes it from any export control consideration.

### 4. Export Control Classification Number (ECCN) - Department of Commerce

EAR99

### 5. International Traffic in Arms Regulations (ITAR) Category - Department of State

### 6. Date Received by SAFE-1

4/4/2013 12:00 AM

### 7. Subject or NRC Category

97

### 8. Enter the date the Group/Author receives Notification of Release

4/4/2013

### 9. Select SAFE-1 Reviewer

User	First Name	Last Name	Email
083595	Rodger	Liljestrand	liljesrp@lanl.gov
113134	Daniel	Gerth	dgerth@lanl.gov

### 10. SAFE-1 Review Date

4/4/2013

### 11. Categories - select only one

Unclassified

#### 11.1. Explain Other

### 12. Comments for LACC/Export Control Review.

Submitted by	Submitted date
083595 - Liljestrand, Rodger	04/04/2013

Section: Final TT Review And Transfer - Completed

Page: Review & Transfer

### 1. IP Master Copyright # (will be auto populated after this section is submitted):

C13106

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## CODE-2013-169 - pysysdevel, 0.5.2

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Approved by	Approved date
118284 - Ramos, Christine	04/04/2013

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