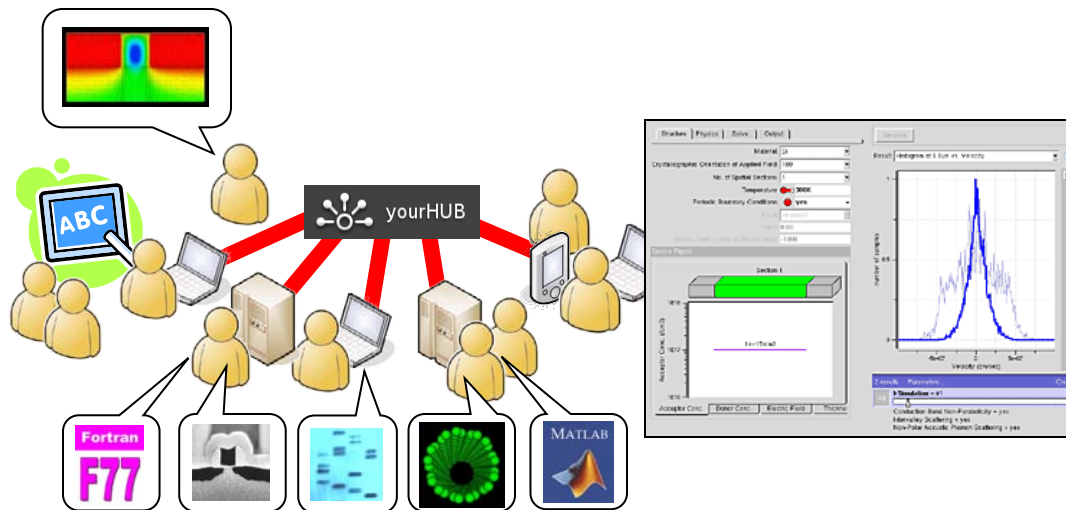


Uploading and Publishing New Tools

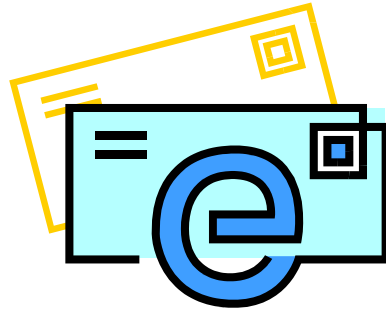
Michael McLennan

HUBzero® Platform for Scientific Collaboration

Purdue University



1 Source code bundles



Hello,
I am grad student from Kazakhstan.
Your tool not compile for me. I get
errors. That's a not very nice.

Hey, can you help me?

2 Pre-compiled binaries



32-bit

64-bit

It doesn't work on my machine!

New version... Reinstall

The screenshot displays the nanoHUB.org website with the CNTbands tool interface. The browser address bar shows the URL `https://nanohub.org/tools/cntbands-ext/session/376867`. The page header includes the nanoHUB.org logo and navigation links: Home, My HUB, Resources, Members, Explore, About, Support. A search bar and user information (Michael McLennan (mmc)) are also visible.

The main content area is titled "CNTbands" and includes a description of the tool and its authors. The tool interface features a "Structure" dropdown set to "Carbon Nanotube" and a "Simulation Method" dropdown set to "Pz orbital". A "Simulate" button is present. The "Result" dropdown is set to "Molecular structure: overall".

The "Chirality (n,m)" section shows input fields for n and m , both set to 7. The "Model parameters" section includes "Tight Binding Energy" set to 3eV and "Carbon-carbon spacing" set to 1.42A. The "Length in 3-D view" is set to 40.

A 3D visualization of a carbon nanotube is displayed in the center, showing a cylindrical structure composed of green spheres and bonds. The interface also includes a "Storage (manage)" indicator showing 28% usage and a "Need Help?" button.



1 New Messages
man (mmlennan)

Search

Logout My Account

Help!

Send Message

21 resources
5 topics
Detailed usage
2 Favorite resources
Blog entries

iconductor
Labs in
te is co-
nd "Tcl/Tk
object-
worldwide,
nder.

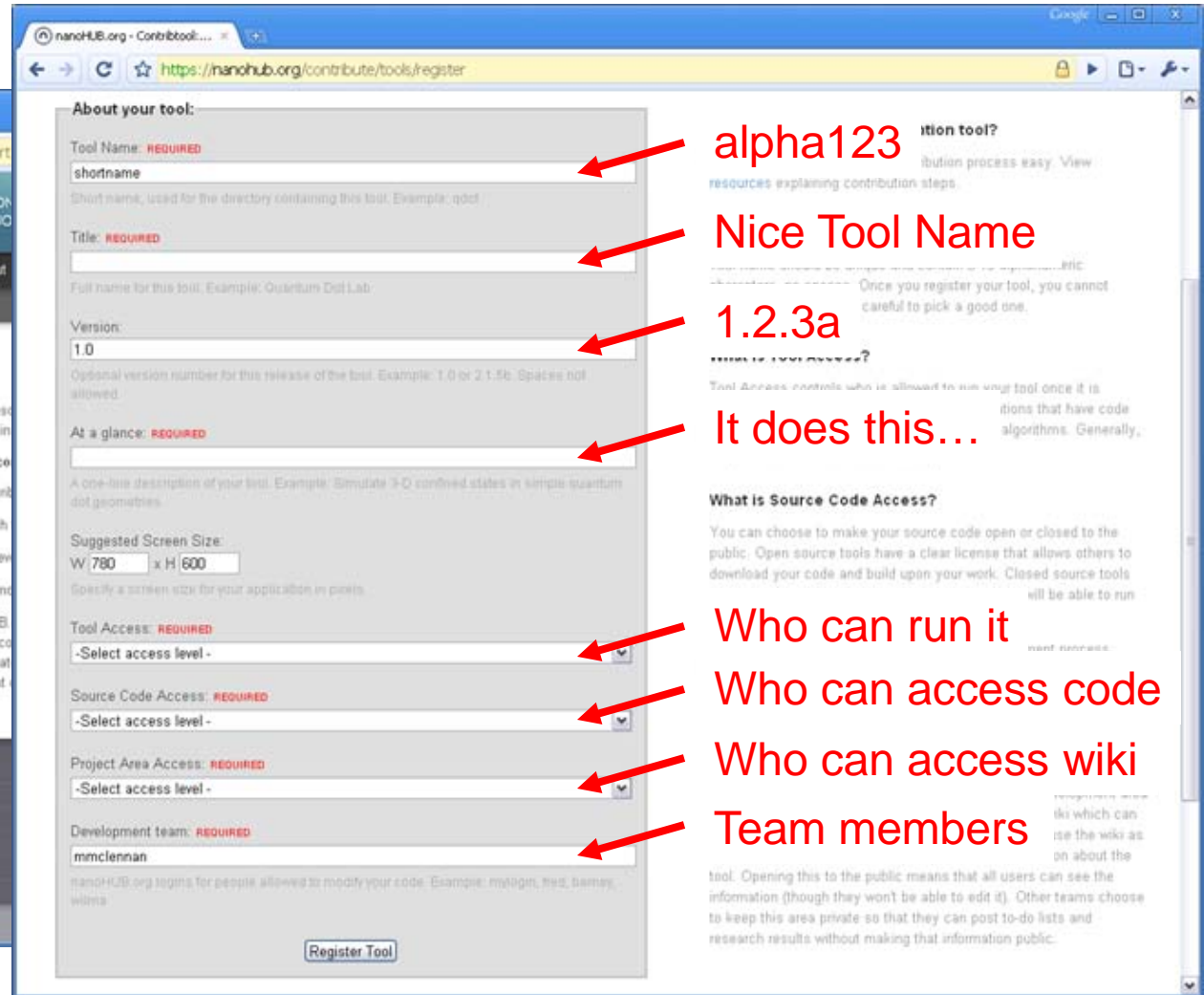
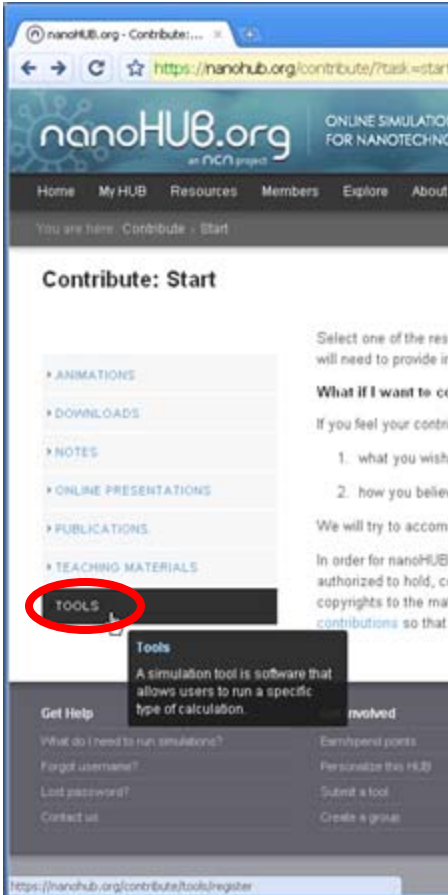
Dr. McLennan was an Architect at Cadence Design Systems, where he developed the SimVision visualization and debugging environment for NC-Sim. He is currently a

Table 1: Overview

Item	Value
Contributions:	21
Total Simulation Users Served:	11,061
Rank by Contributions:	24 / 806
First Contribution:	14 Sep 2004
Last Contribution:	12 Jul 2010
Citations on Contributions:	62

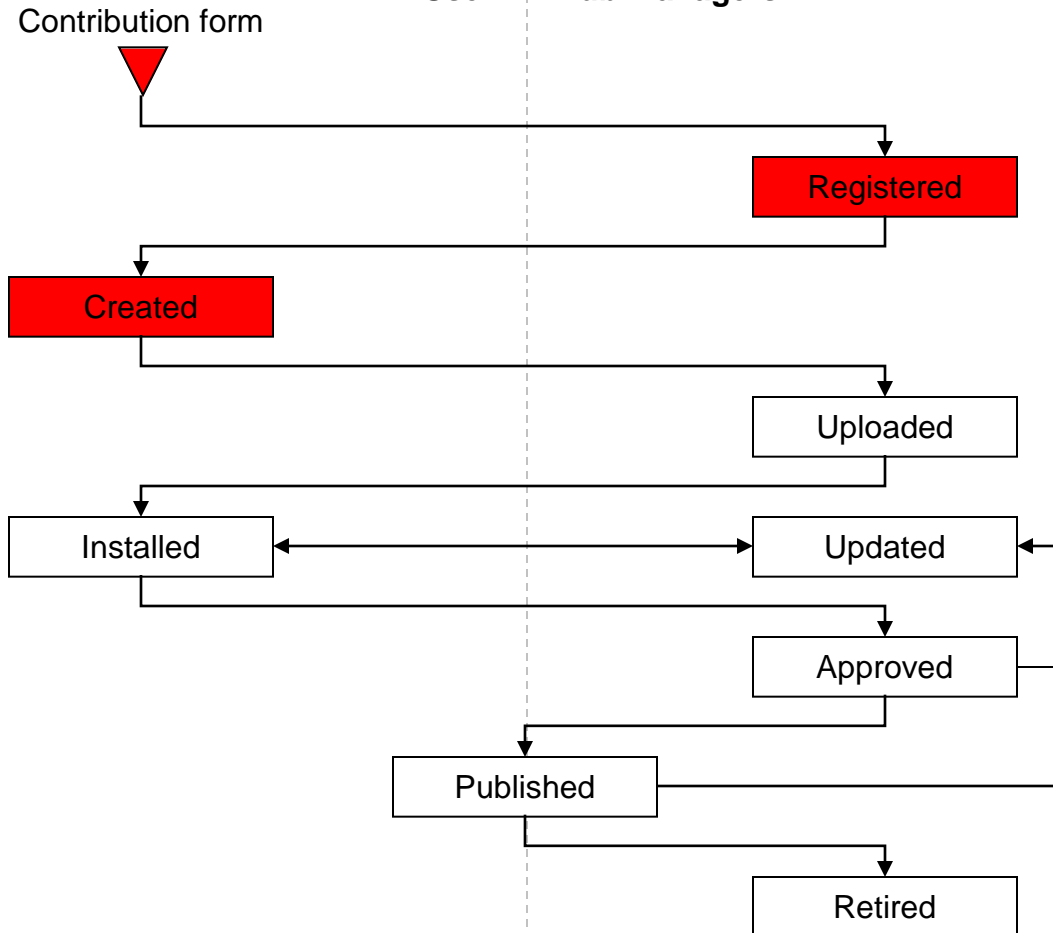
The image shows two overlapping browser windows of the nanoHUB.org website. The background window shows the main site with a navigation menu where 'Contribute' is highlighted. The foreground window shows the 'Contribute' page with the following content:

- Present your work!**: Become a contributor and share your work with the community! Contributing content is easy. Our step-by-step forms will guide you through the process.
- What do I need?**: The submission process will guide you through step-by-step, but for more detailed instructions on what can be submitted and how, please see the list of submission types below.
- Get Started**: A button circled in red, indicating the start of the upload process.
- Before starting**: Includes **Intellectual Property Considerations** (All materials contributed must have clearly defined rights and privileges. Online presentations and instructional material are normally licensed under Creative Commons 3. Read more details about our licensing policies.) and **Questions or concerns?** (We hope that our self-service upload process is intuitive and easy to use. If you encounter any problems during the upload process or need assistance of any kind, please file a trouble report.)
- What can I contribute?**:
 - Animations**: An animation is a Flash-based demo or short movie that
 - Downloads**: A download is a type of resource that users can download and use
 - Notes**: Notes are typically a category for any resource that might not fit any

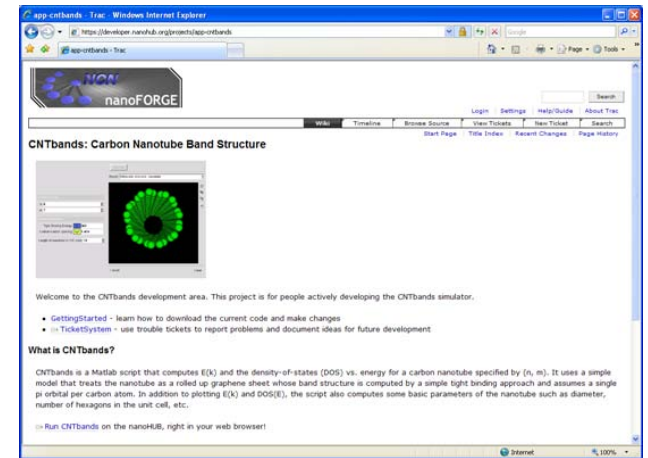


waiting for...

User Hub managers



<https://yourhub.org/tools>



Hub managers create a project area for your tool

- Wiki for project documentaton
- Subversion source code control
- Code change history

app-cntbands - Trac - Windows Internet Explorer

https://developer.nanohub.org/projects/app-cntbands

NCN nanoFORGE

Wiki | Timeline | Browse Source | **View Tickets** | New Ticket | Search

CNTbands: Carbon Nanotube Band Structure

Result: Molecular structure visualization

Welcome to the CNTbands development area. This project is for people actively developing the CNTbands simulator.

- [GettingStarted](#) - learn how to download the current code and make changes
- [TicketSystem](#) - use trouble tickets to report problems and document ideas for future development

What is CNTbands?

CNTbands is a Matlab script that computes $E(k)$ and the density-of-states (DOS) vs. energy for a carbon nanotube specified by (n, m) . It uses a simple model that treats the nanotube as a rolled up graphene sheet whose band structure is computed by a simple tight binding approach and assumes a single pi orbital per carbon atom. In addition to plotting $E(k)$ and $DOS(E)$, the script also computes some basic parameters of the nanotube such as diameter, number of hexagons in the unit cell, etc.

[Run CNTbands](#) on the nanoHUB, right in your web browser!

Login | Search

View Tickets

- Buttons to access project functions:
- Wiki documentation
 - Source code
 - Timeline of changes

NOTE: You may have to log in to see some buttons

The screenshot shows a web browser window displaying a Trac wiki page for 'CNTbands'. The page content includes a welcome message, a list of links (GettingStarted, TicketSystem), a section 'What is CNTbands?' with a paragraph of text, and a section 'How do I use this site?' with a list of links (WikiFormatting, Images, TracGuide, Trac FAQ, The Trac project). At the bottom of the page, there is a button labeled 'Edit This Page' which is circled in red. Below the button, there is a form for 'Change information' with fields for 'Your email or username:' (containing 'mmc') and 'Comment about this change (optional):'. A mouse cursor is pointing at the bottom of the page.

On the right side of the screenshot, a text box displays the Wiki Markup code for the page content:

```

= CNTbands: Carbon Nanotube Band Structure =
[[image(cntbands.gif)]]

Welcome to the CNTbands development area. This
* GettingStarted - learn how to download the c
* [[link(/report TicketSystem)]] - use trouble

== What is CNTbands? ==

CNTbands is a Matlab script that computes E(k
m). It uses a simple model that treats the nano
tight binding approach and assumes a single pi
computes some basic parameters of the nanotube

[https://www.nanohub.org/simulation_tools/cntba
  
```

The text *Wiki Markup* is written in a large, italicized font over the code box.

Below the 'Edit This Page' button, the text *Once logged* is written in a large, italicized font.

At the bottom right of the screenshot, there is a note: *Note: See WikiFormatting and TracWiki for help on editing wiki content.*

WikiFormattingSimple - nanoHUB Development - Trac - Windows Internet Explorer

https://developer.nanohub.org/projects/nanohub/wiki/WikiF

NGN nanoFORGE

logged in

Wiki Timeline Roadmap Browse

CNTbands v2.0

Overview

The tool **CNTbands** has many features:

- Simulate nano-ribbons
- Simulate nanotubes
 - with simple Pz-orbital model
 - with Extended Huckel Theory

Visit this tool or [nanoHUB](#)

To build this tool:

```
% cd /apps/cntbands-ext/current/src
% make all
% make install
```

Edit This Page Attach File

Download in Plain Text

Complete instructions in your project area at [wiki/WikiFormatting](#)

```
= CNTbands v2.0 =
```

```
== Overview ==
```

```
The tool '''CNTbands''' has many features:
```

```
* Simulate nano-ribbons
```

```
* Simulate nanotubes
```

```
* with simple 'Pz-orbital model'
```

```
* with 'Extended Huckel Theory'
```

```
Visit this tool on [http://www.nanohub.org nanoHUB]
```

```
To build this tool:
```

```
{{{
% cd /apps/cntbands-ext/current/src
% make all
% make install
}}}
```

CNTbands v2.0

Overview

The tool **CNTbands** has many features:

- Simulate nano-ribbons
- Simulate nanotubes
 - with simple *Pz-orbital model*
 - with *Extended Huckel Theory*

See [NewPage](#) for more information.

```

simulate nanotubes
* with simple 'Pz-orbital model'
* with 'Extended Huckel Theory'

See NewPage for more information.

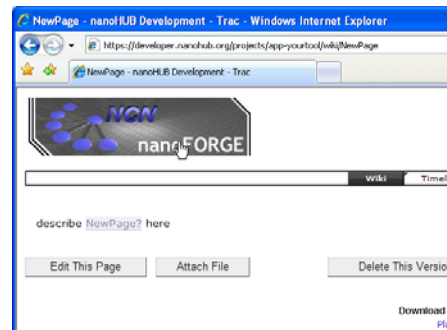
Visit this tool on [http://www.nanohub.

To build this tool:
    
```


Any word with mixed case is treated as a link

Click on any link? to create that page:

See [NewPage?](#) for more information.

The screenshot shows a web browser window at nanoHUB.org. The main content area is titled "My Contributions" and has a sub-section for "Tools". A single tool, "biosensorlab", is listed with a status of "created!". The text "biosensorlab" is circled in red. To the right of the tool name are icons for questions (0), forks (0), and warnings (0). Below this section is a heading "Other Contributions in Progress" followed by the text "No contributions found." and a button "Start a new contribution >". A mouse cursor is pointing at the "Start a new contribution >" button. On the left side of the browser, there are several sidebar panels: "My Tools" (listing recent tools like CNTbands, Resonant Tunneling Diode Simulator, etc.), "My Favorites" (empty), "My Groups" (empty), and a smaller "My Contributions" panel that mirrors the main content area. The browser's address bar shows "https://nanohub.org/myHub".



The screenshot shows the nanoHUB.org website interface. The main heading is "Contribtool: Status for biose". Below this, there are tabs for "STATUS: Registered", "Created", and "Uploads". A sub-heading reads "This tool is one of 130 tools under developpr". A "Tool information" section is visible, listing details such as Title (Bio-sensor Lab), Version (This version 1.), At a glance (Simulates), Description (Preview | Edit), VNC geometry (780x600), Tool execution (restricted to us), Source code (closed source), Project area (restricted to de), and Development team (N/A). There is also a "Developer Tools" section with links for History, Wiki, Source, and Timeline.

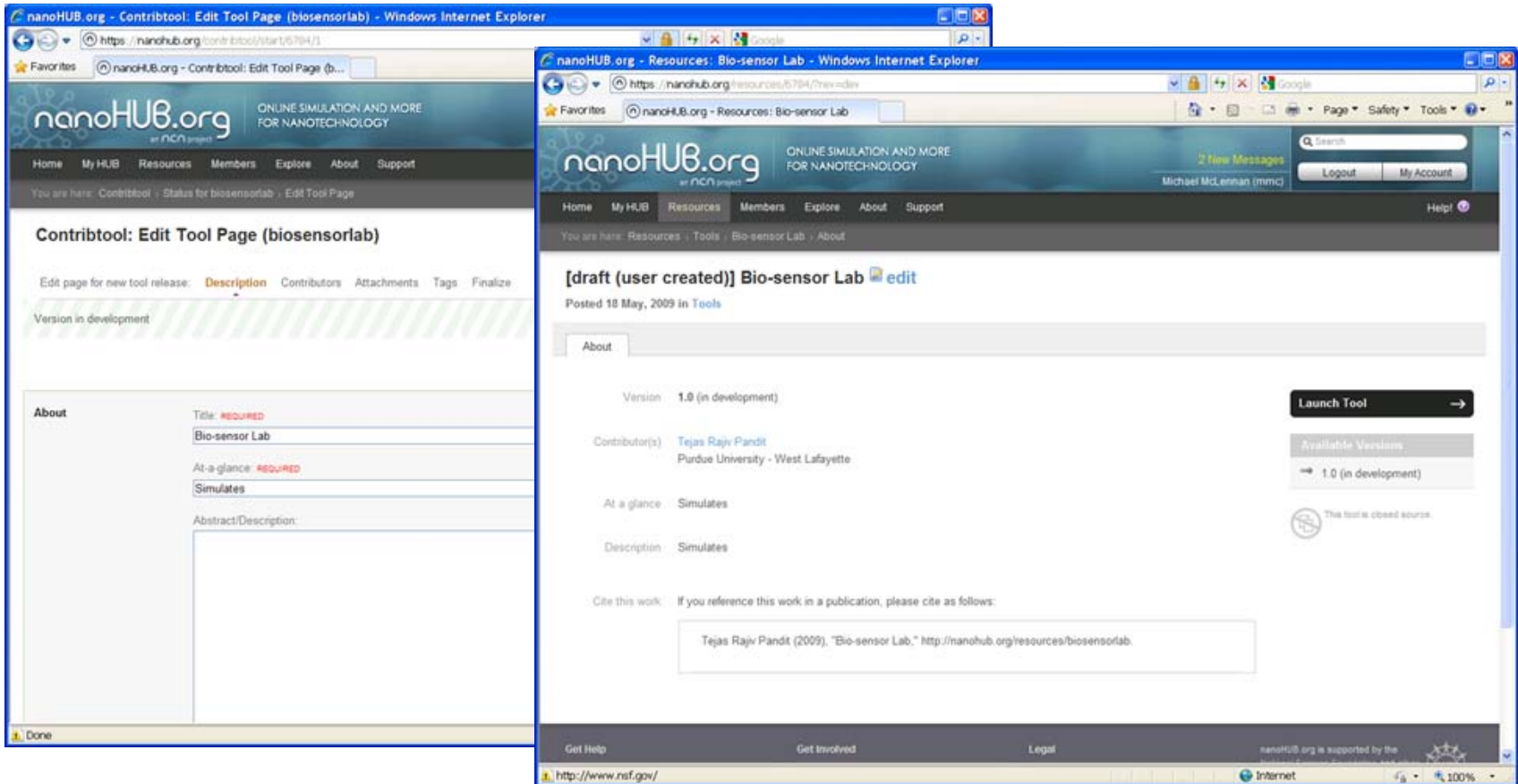
We are waiting for You

Once your source code has been uploaded into your project area, click here to let us know:

- ➔ [My code has been uploaded](#)

Remaining steps before we can publish your tool:

- [Register your tool on the nanoHUB.org](#)
- Upload your source code [I've done this](#)
- ➔ Make the page that describes your tool. [Create this page...](#)
- Test and approve your tool
- Publish your tool so that others can see it on the nanoHUB.org



This is the page that people see when they find your tool on the hub

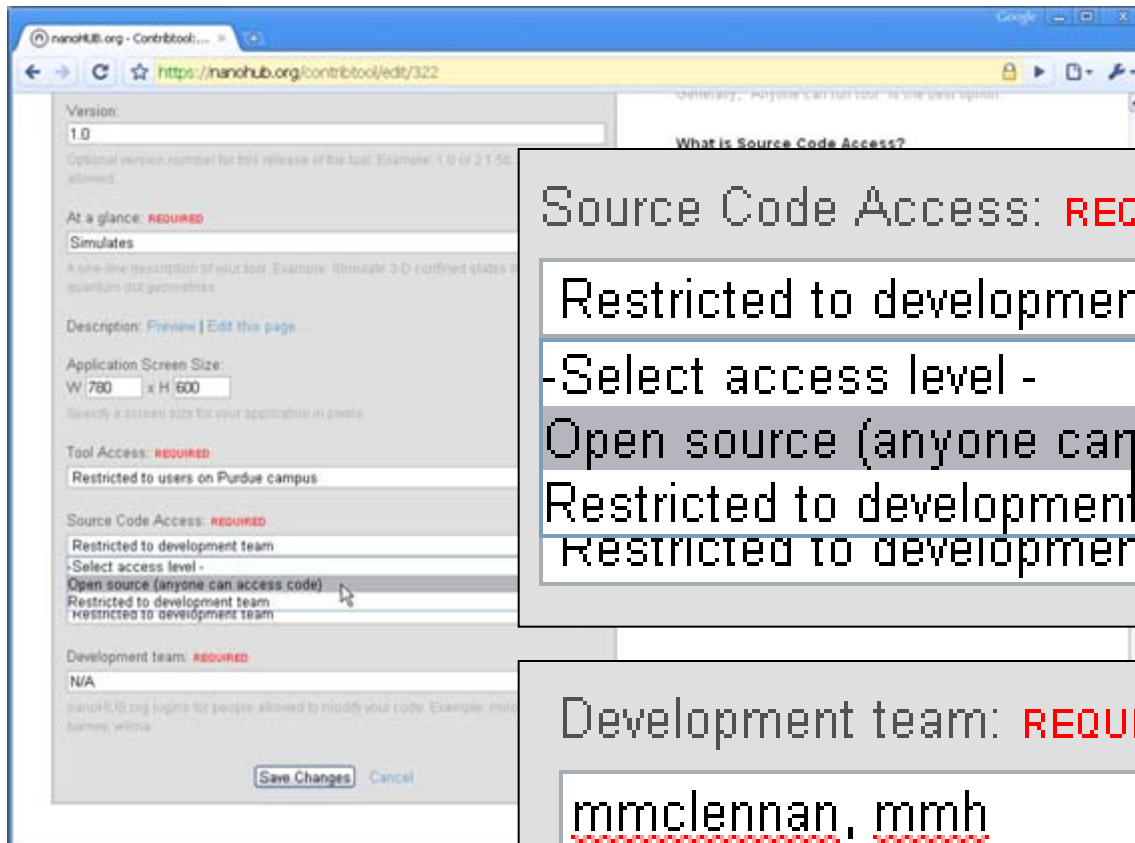
The screenshot shows the nanoHUB.org website interface. At the top, there is a navigation bar with the nanoHUB.org logo and the tagline "ONLINE SIMULATION AND MORE FOR NANOTECHNOLOGY". A user notification for "142 New Messages" from Michael McLennan (mmc) is visible. The main content area displays the status of a tool named "biosensorlab" as "Created". A callout box highlights an "edit" button with a pencil icon. Below this, a "Tool Information" table provides details about the tool, including its title, version, description, and execution restrictions. To the right, a "What's next?" section offers guidance on how to use the project area and access source code. At the bottom, a "Developer Tools" section lists various utility links.

Tool Information

Title	Bio-sensor Lab (biosensorlab - id #322)
Version	This version 1.0 (under development)
At a glance	Simulates
Description	Preview Edit this page
VNC geometry	780x600
Tool execution	restricted to users on Purdue campus
Source code	closed source
Project area	restricted to development team
Development team	N/A

Developer Tools

- [History](#)
- [Wiki](#)
- [Source](#)
- [Timeline](#)
- [Message](#)
- [Cancel](#)



Source Code Access: **REQUIRED**

Restricted to development team

-Select access level -

Open source (anyone can access code)

Restricted to development team

Restricted to development team

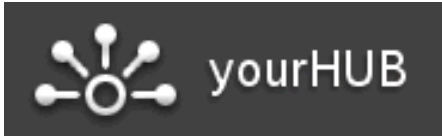
Development team: **REQUIRED**

mmclennan, mmh


```

/*
 * =====
 * AUTHOR: Michael McLennan
 * Copyright (c) 2011 Purdue University
 *
 * See the file "license.terms" for information on
 * usage and redistribution of this file, and for a
 * DISCLAIMER OF ALL WARRANTIES.
 * =====
 */
...

```

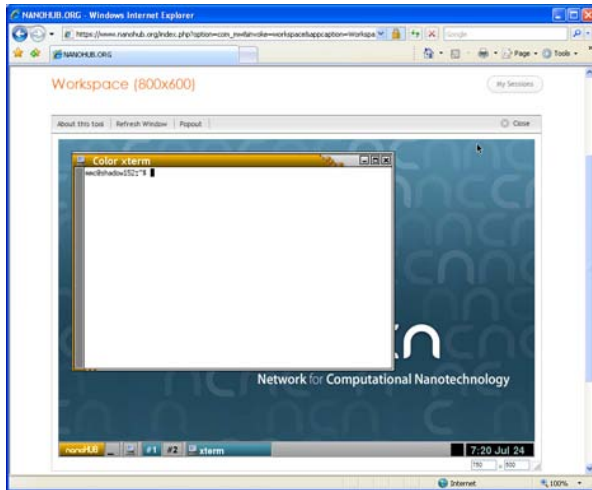


Version 2.3 - published on 18 Dec 2009
 DOI: 10254/hanohub-r1838.5 [cite this](#)
 Open source: [license](#) | [download](#)

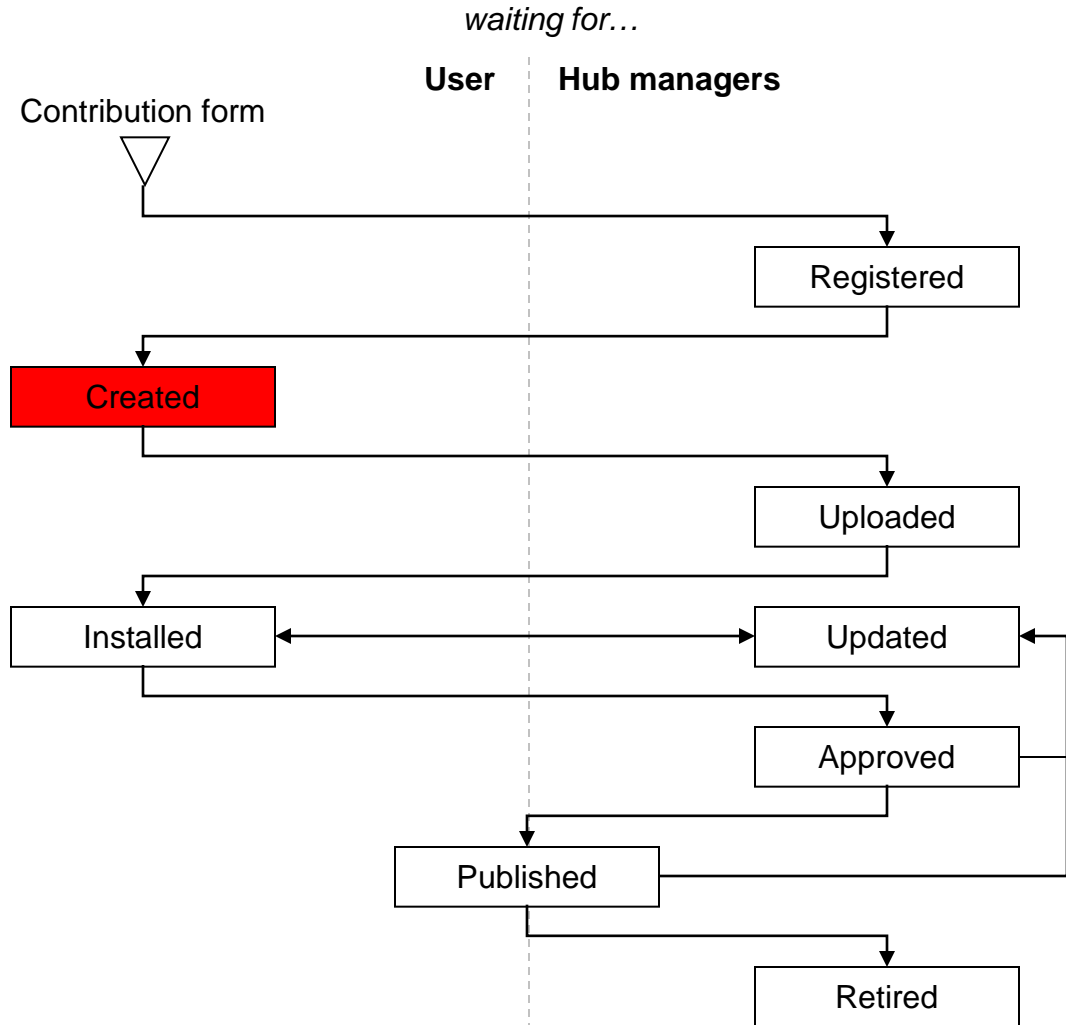


www.opensource.org





Upload your code into a hub workspace. Compile, test, and commit changes back to your Subversion repository.



Tool status page:
<http://yourhub.org/contribtool>

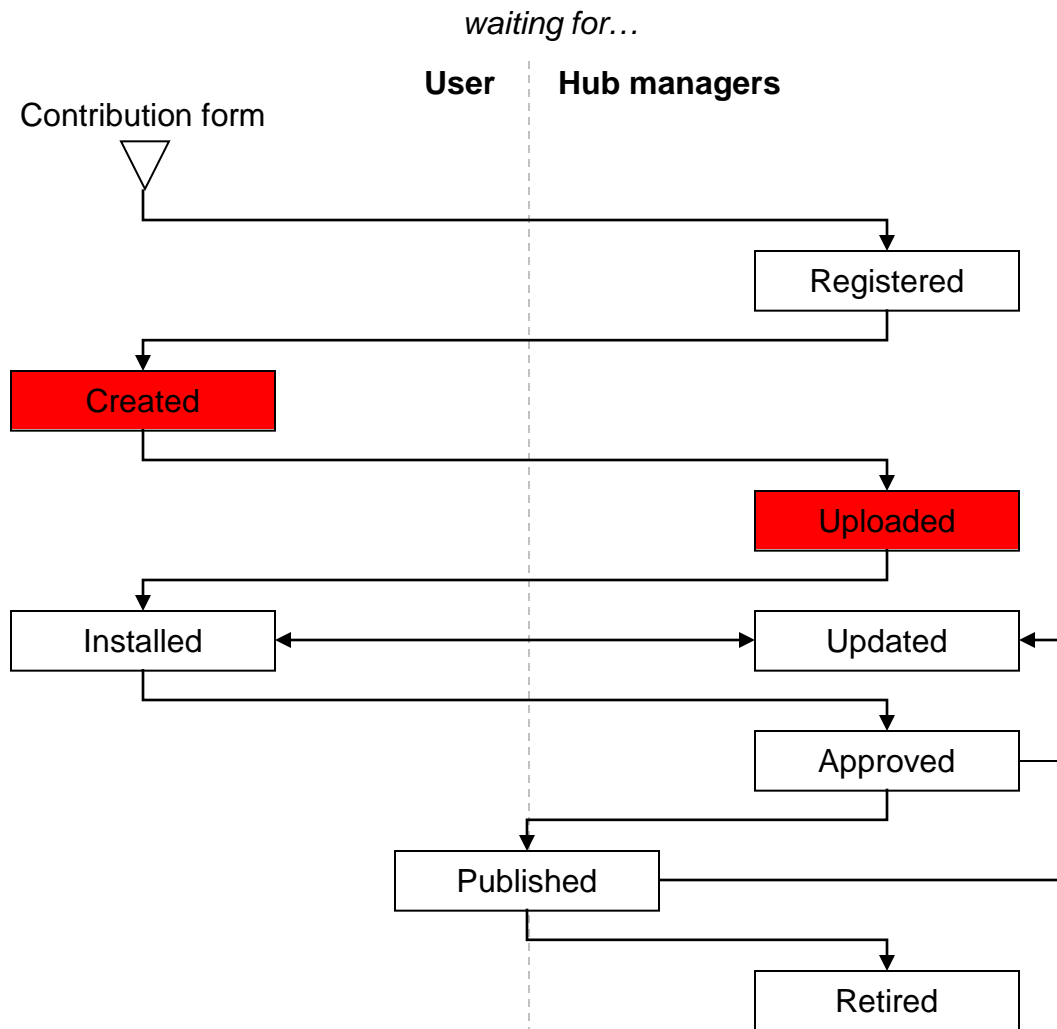
We are waiting for You

Once your source code has been uploaded into your project area, click here to let us know:

➔ [My code has been uploaded](#)

Remaining steps before we can publish your tool:

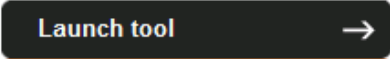
- [Register your tool on the nanoHUB.org](#)
- Upload your source code [I've done this](#)
- ➔ [Make the page that describes your tool. Create this page...](#)
- Test and approve your tool
- Publish your tool so that others can see it on the nanoHUB.org



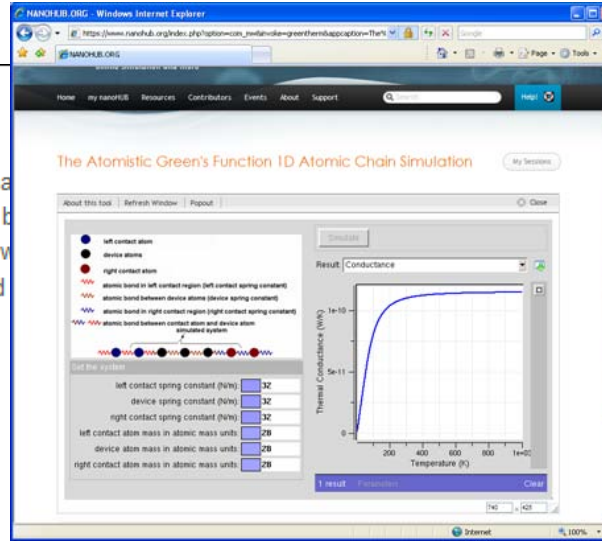
What's next?

Your latest code is installed and ready on nanohub.org. Please test your tool by clicking the button below to ensure that everything is working properly, as well as verify that the page describing your tool is created with correct information:

➔ Test your application:



➔ Review the page describing your tool



waiting for...

user Hub managers

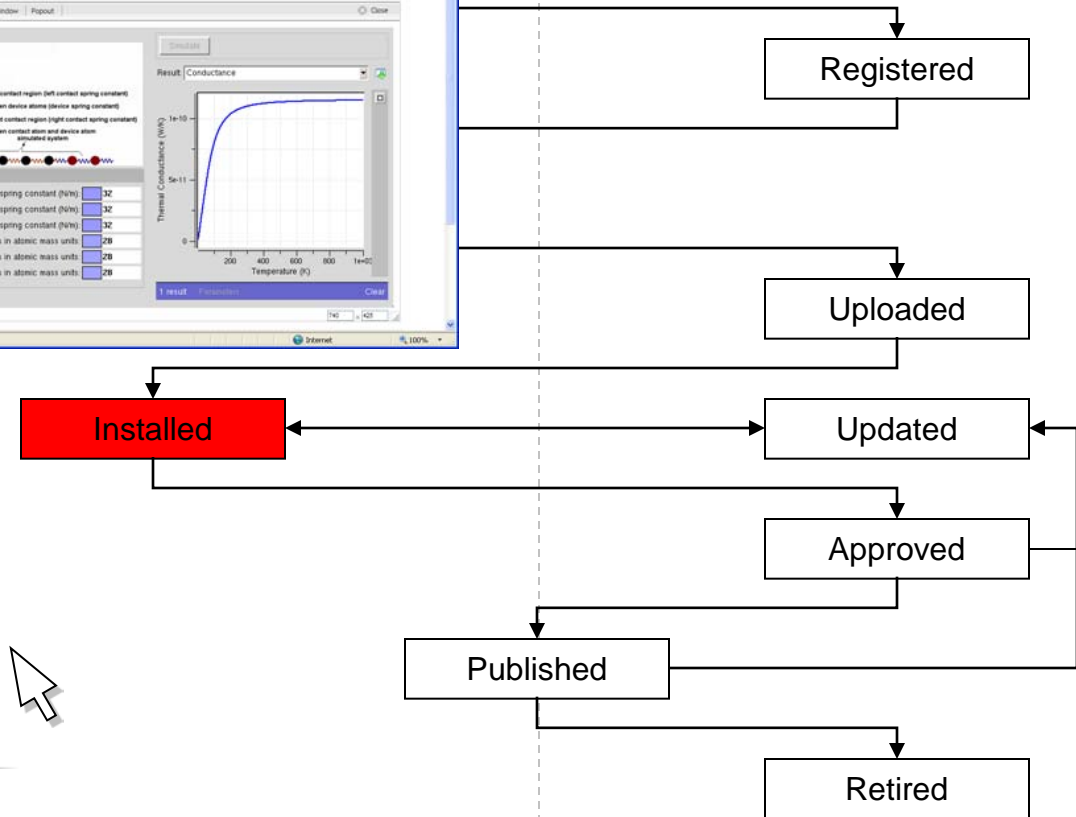
We are waiting for You

Once you tested your tool and verified that it is working properly, click here to let us know:

➔ My tool is working properly. I approve it.

Need to make changes? Once you've checked in your latest fixes, click here to let us know:

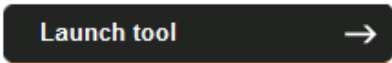
➔ I've fixed my code. Please install the latest updates.



What's next?

Your latest code is installed and ready on nanoHUB.org. Please test your tool by clicking the button below to make sure that everything is working properly, as well as verify that the page describing your tool is created and displays correct information:

→ Test your application:



→ [Review the page describing your tool](#)

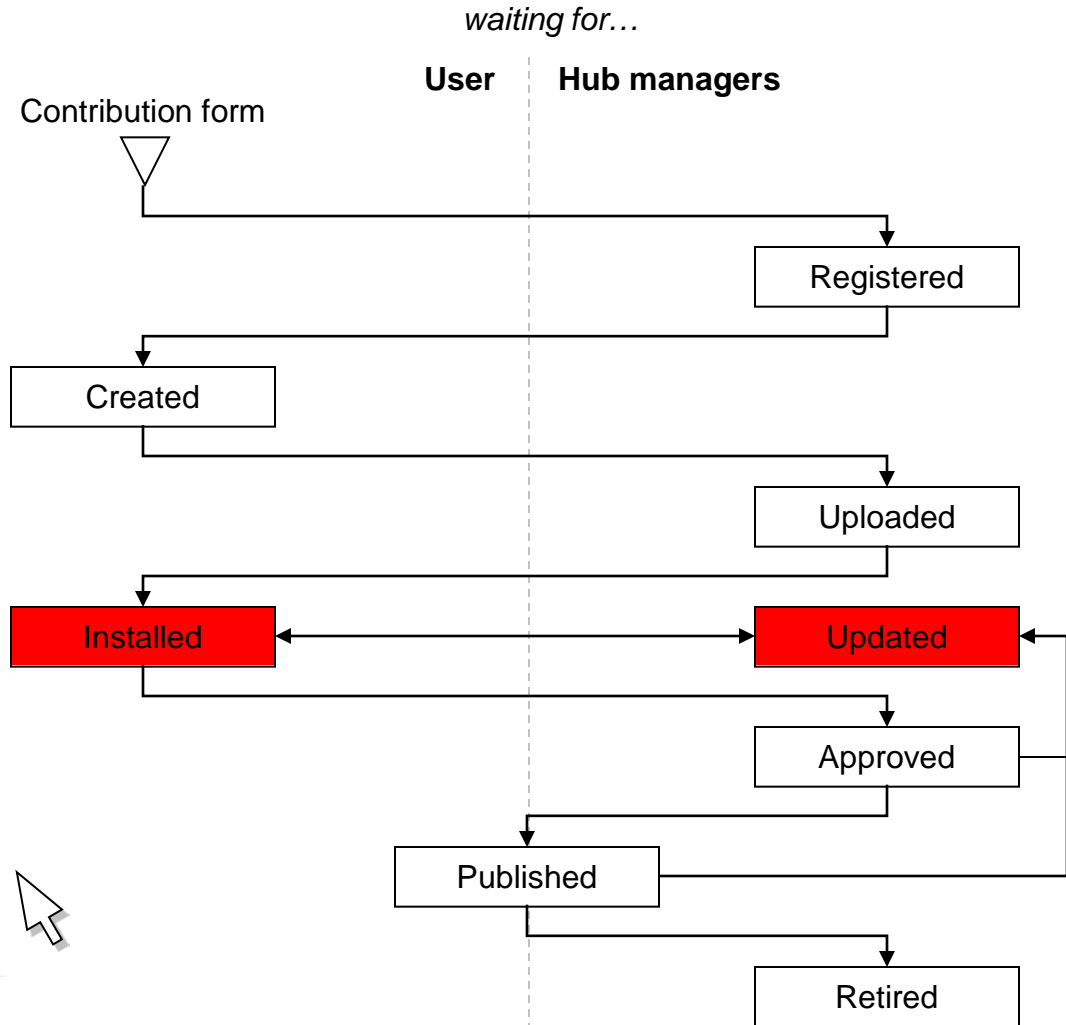
We are waiting for You

Once you tested your tool and verified that it is working properly, click here to let us know:

→ [My tool is working properly. I approve it.](#)

Need to make changes? Once you've checked in your latest fixes, click here to let us know:

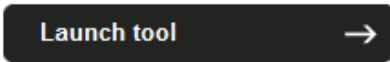
→ [I've fixed my code. Please install the latest updates.](#)



What's next?

Your latest code is installed and ready on nanoHUB.org. Please test your tool by clicking the button below to make sure that everything is working properly, as well as verify that the page describing your tool is created and displays correct information:

→ Test your application:



→ [Review the page describing your tool](#)

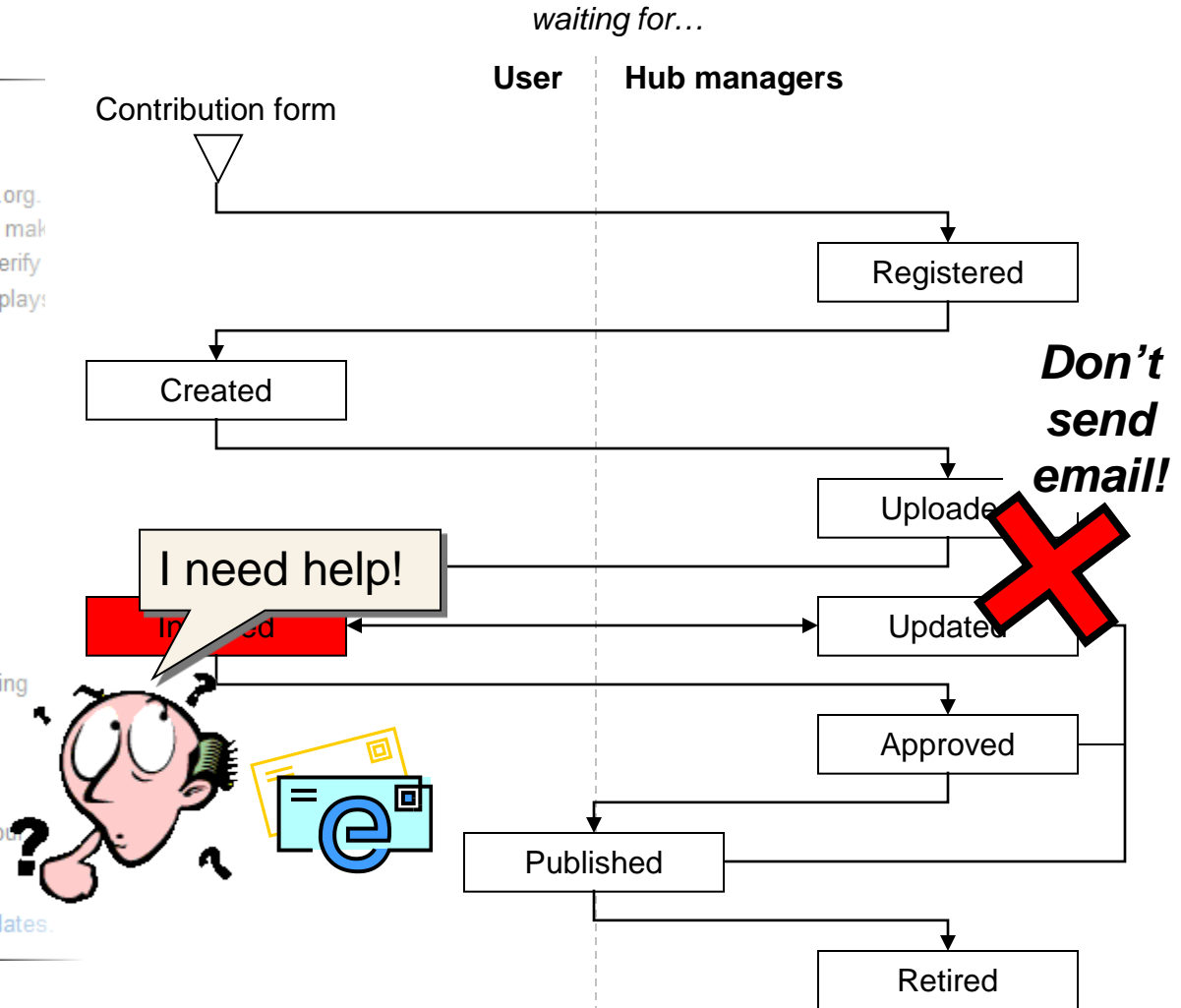
We are waiting for You

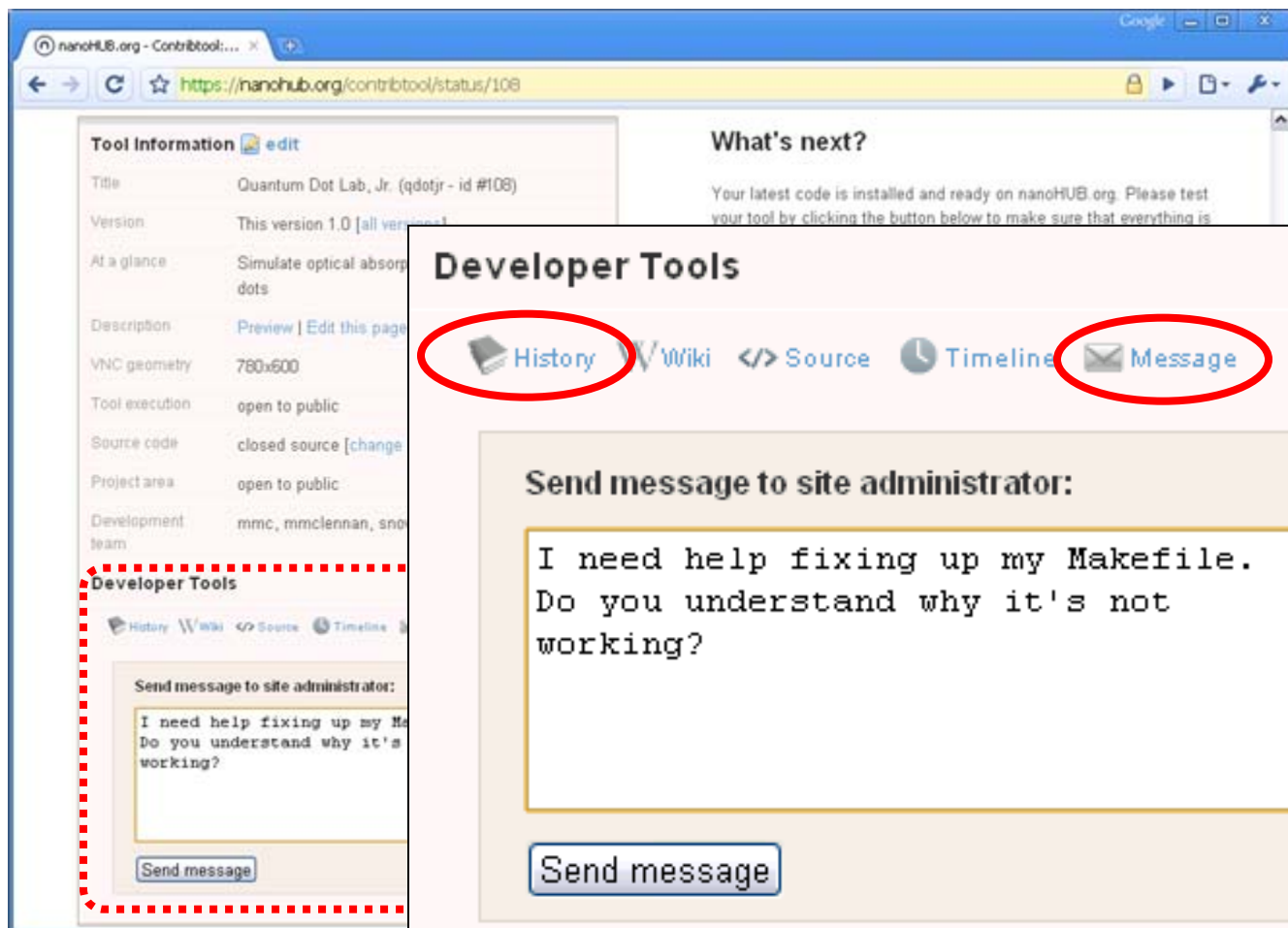
Once you tested your tool and verified that it is working properly, click here to let us know:

→ [My tool is working properly. I approve it.](#)

Need to make changes? Once you've checked in your latest fixes, click here to let us know:

→ [I've fixed my code. Please install the latest updates.](#)



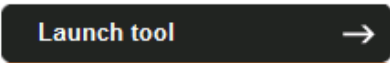


Message goes to the whole team, and is stored in the history

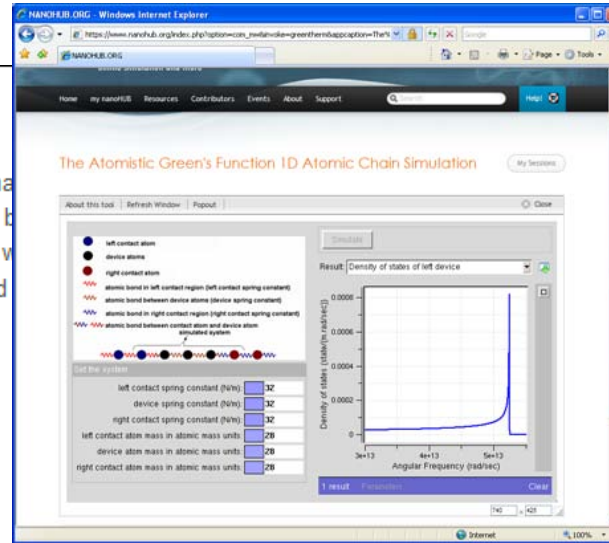
What's next?

Your latest code is installed and ready on n...
Please test your tool by clicking the button b...
sure that everything is working properly, as v...
that the page describing your tool is created...
correct information:

→ Test your application:



→ Review the page describing your tool



waiting for...

user Hub managers

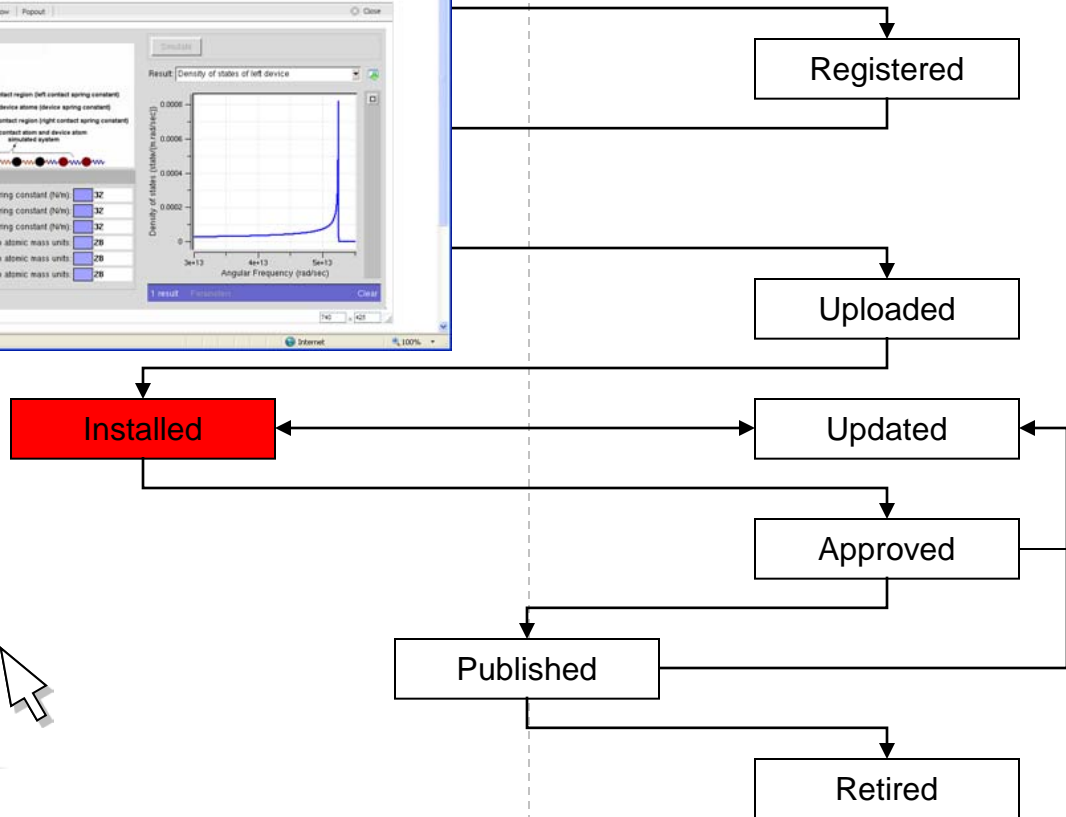
We are waiting for You

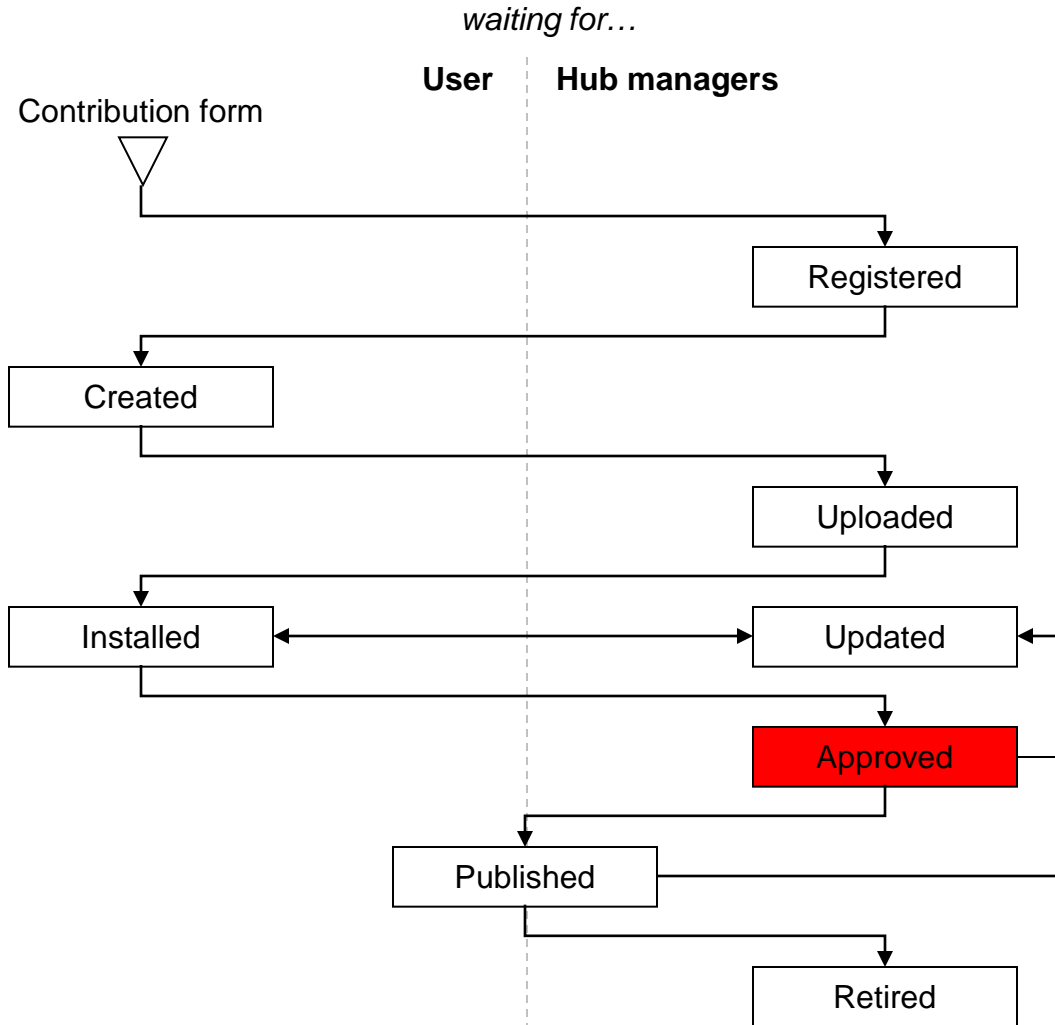
Once you tested your tool and verified that it is working properly, click here to let us know:

→ My tool is working properly. I approve it.

Need to make changes? Once you've checked in your latest fixes, click here to let us know:

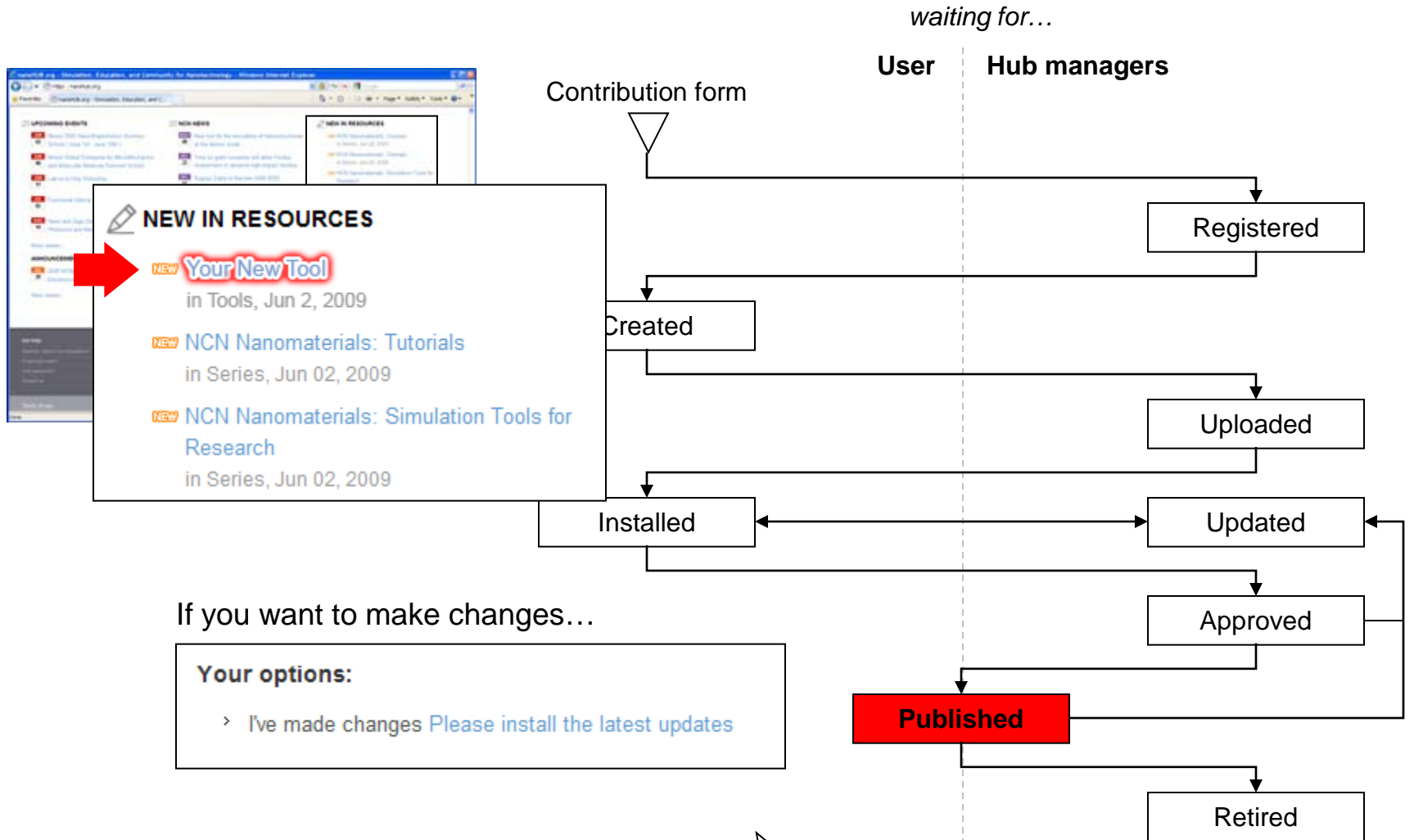
→ I've fixed my code. Please install the latest updates.

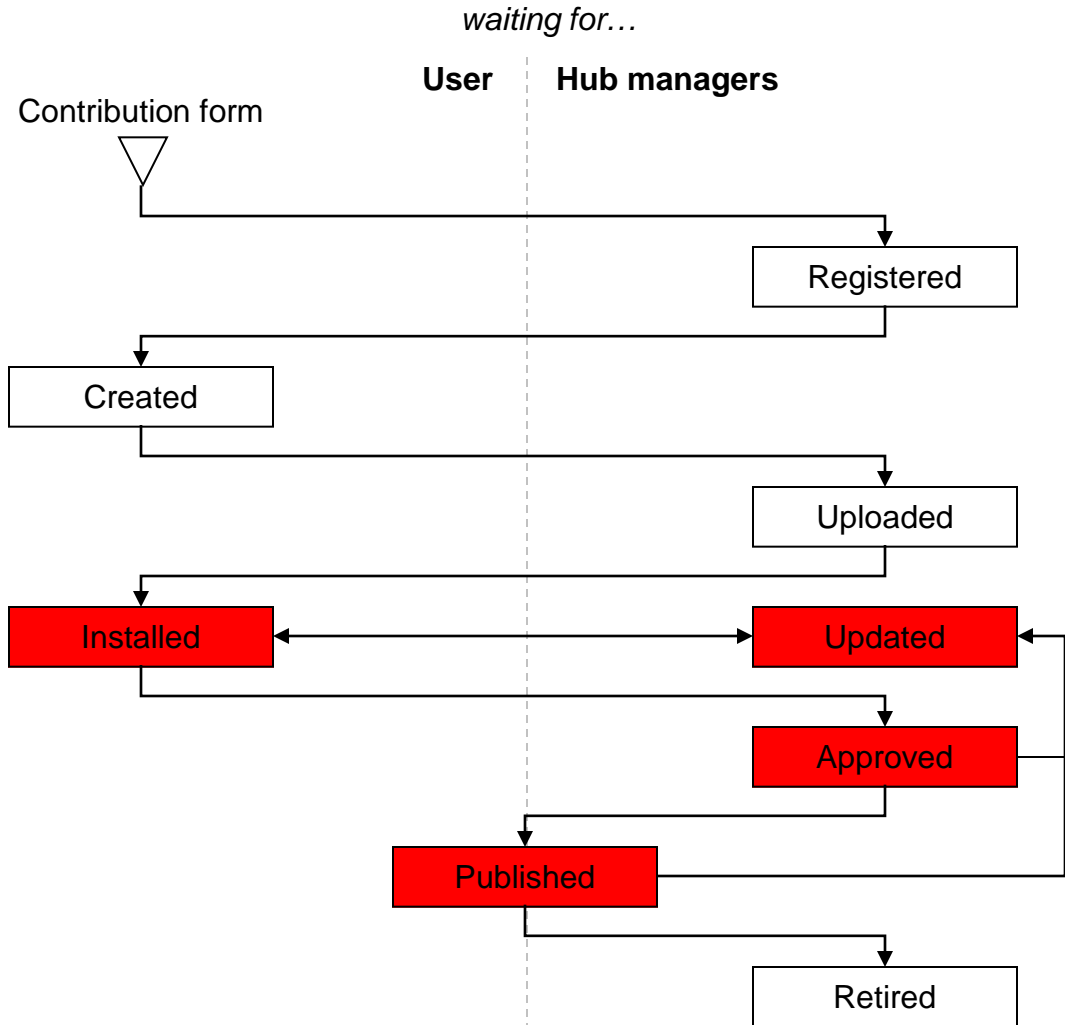




Hub managers...

- Take one last look
- Make sure that the tool works
- Check the tool information page
- Then, publish your tool





Re-install your tool
You approve it
 One last look
Your changes are published

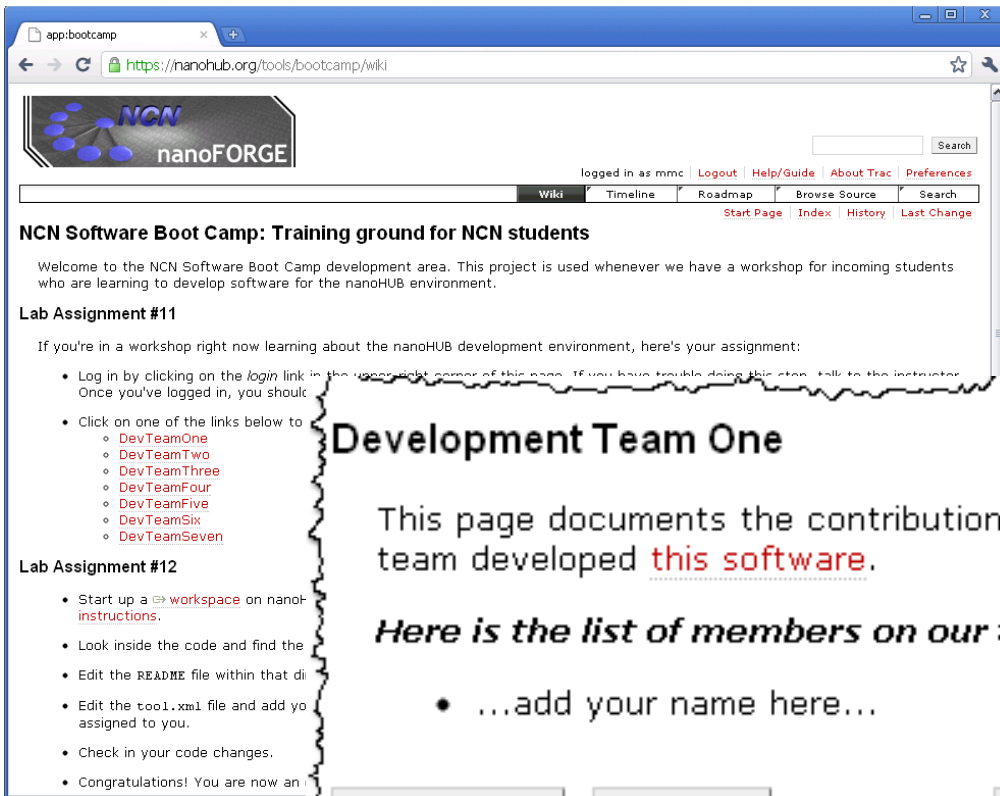
Don't let your code gather dust on the shelf. Get it out there!

Upload your own:

- Tools
- Tutorials

<https://nanohub.org/tools/bootcamp/wiki>

- Work in teams
- Edit your team's wiki page
- Add your name to the list



Development Team One

This page documents the contributions of **Team One** at the 2011 NCN S team developed **this software**.

Here is the list of members on our team:

- ...add your name here...

Edit this page

Attach file

Delete this version

Delete page