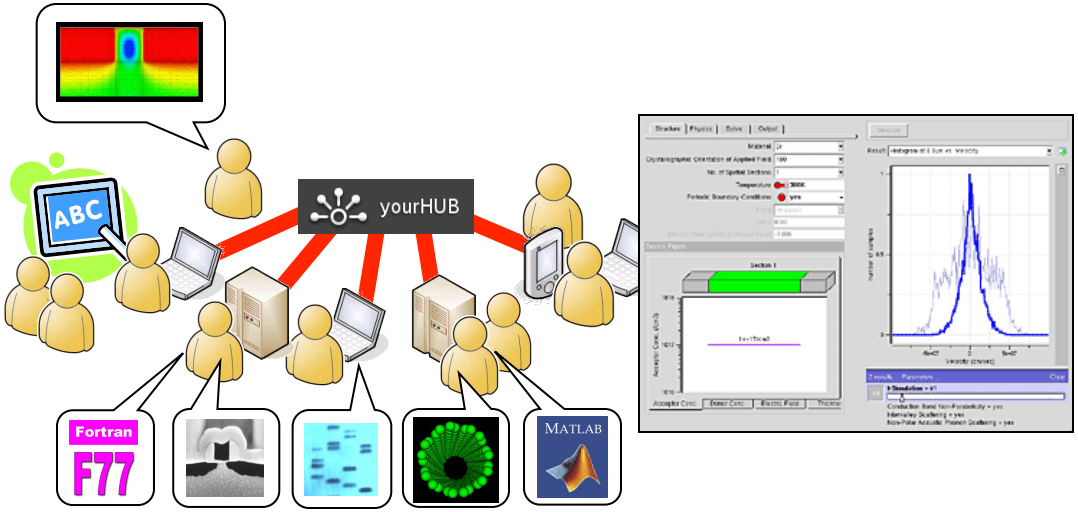
Uploading and Publishing New Tools

George Howlett
Purdue University



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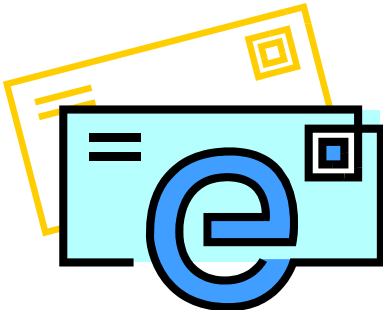
Why not just downloads?

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

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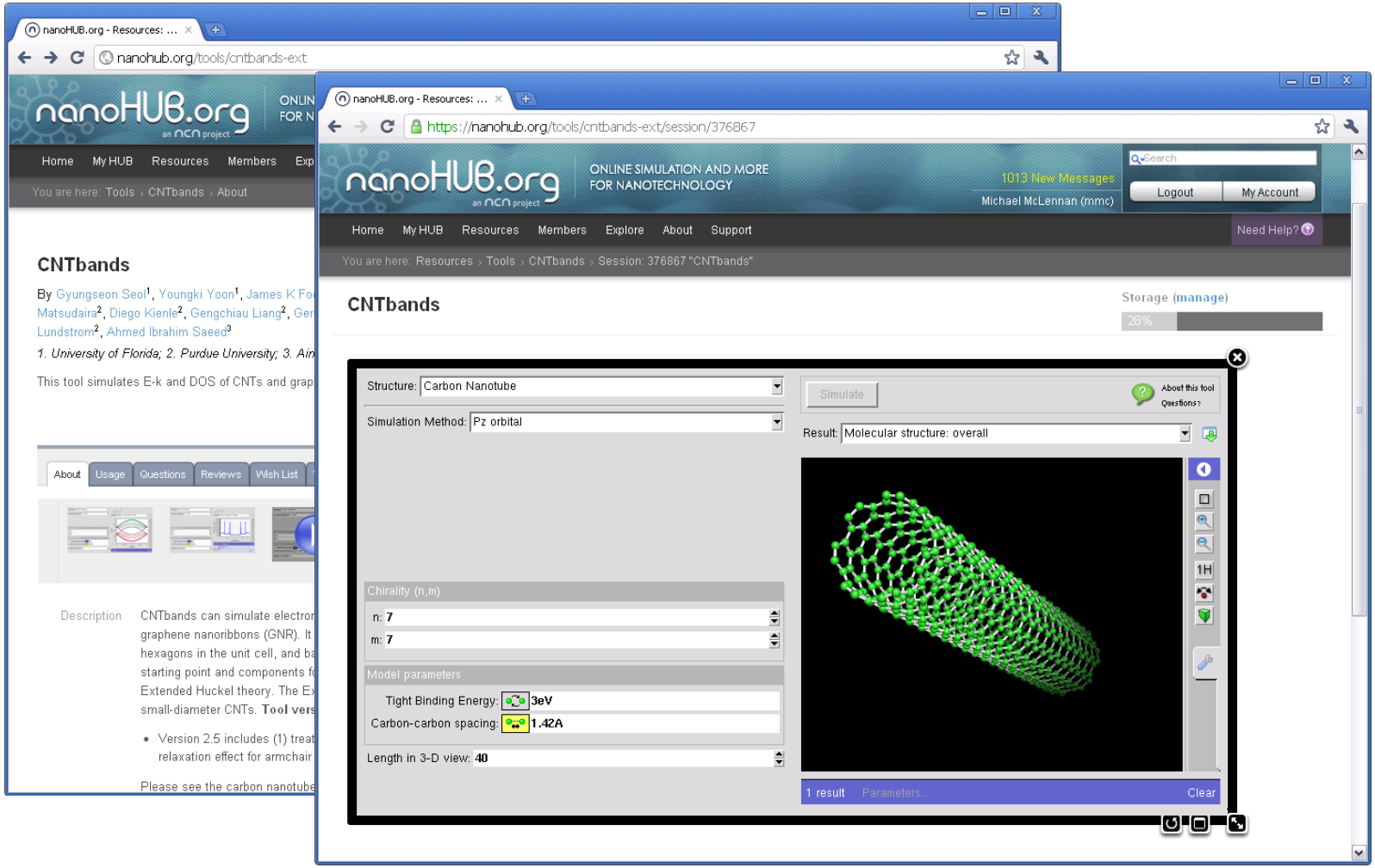
Access tools online



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Your Own Impact Story

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

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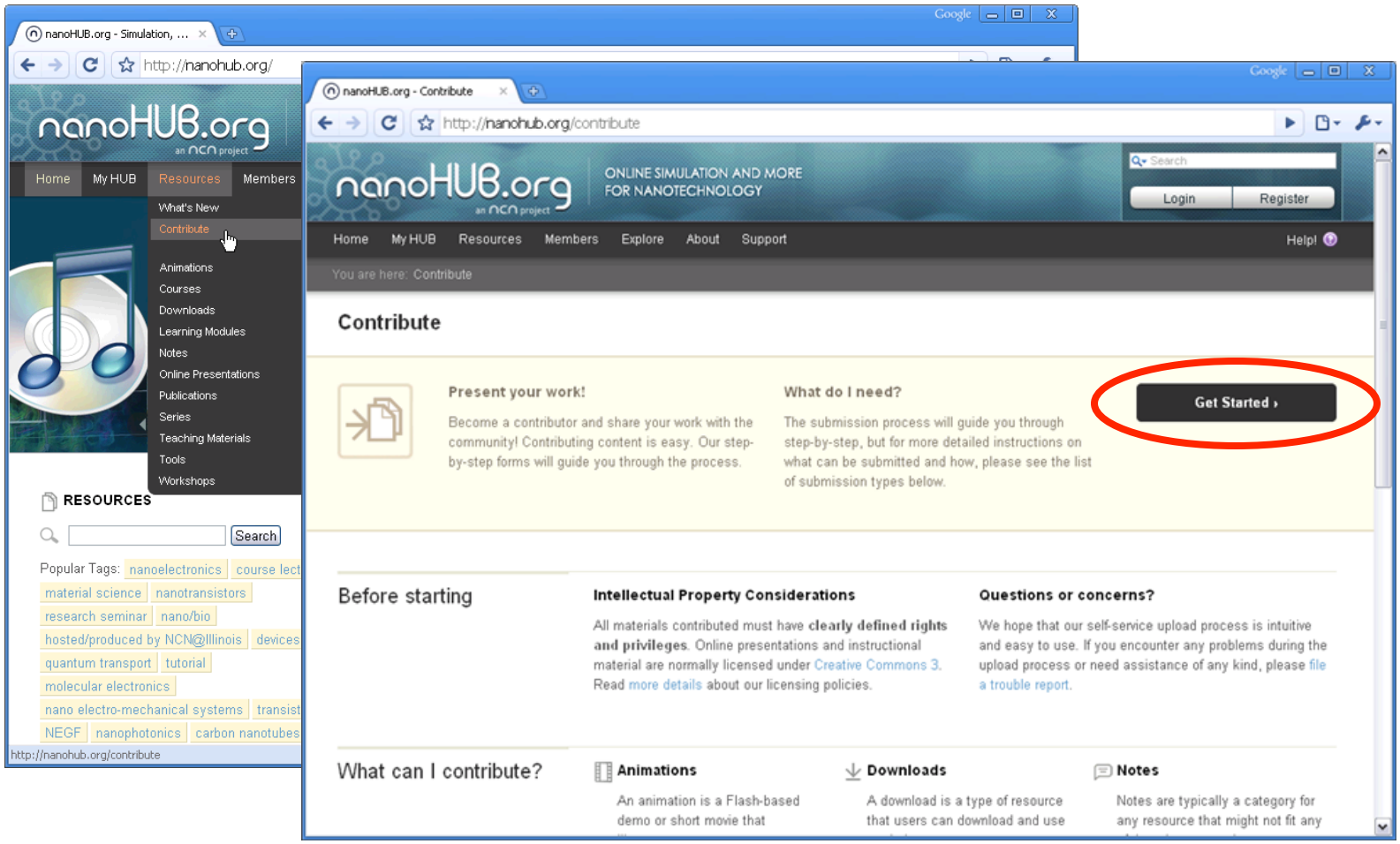
Start the upload process



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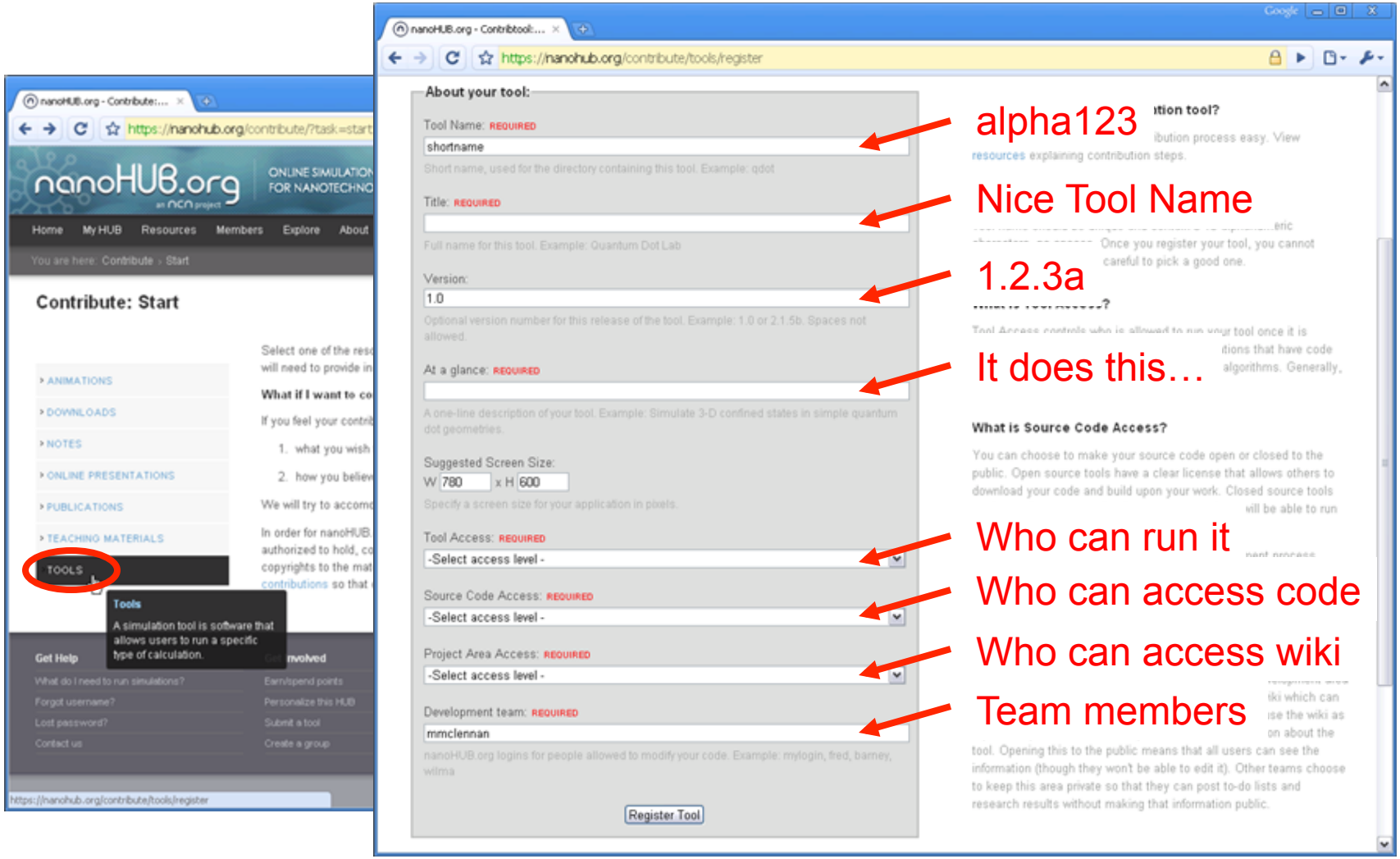
Tool registration form



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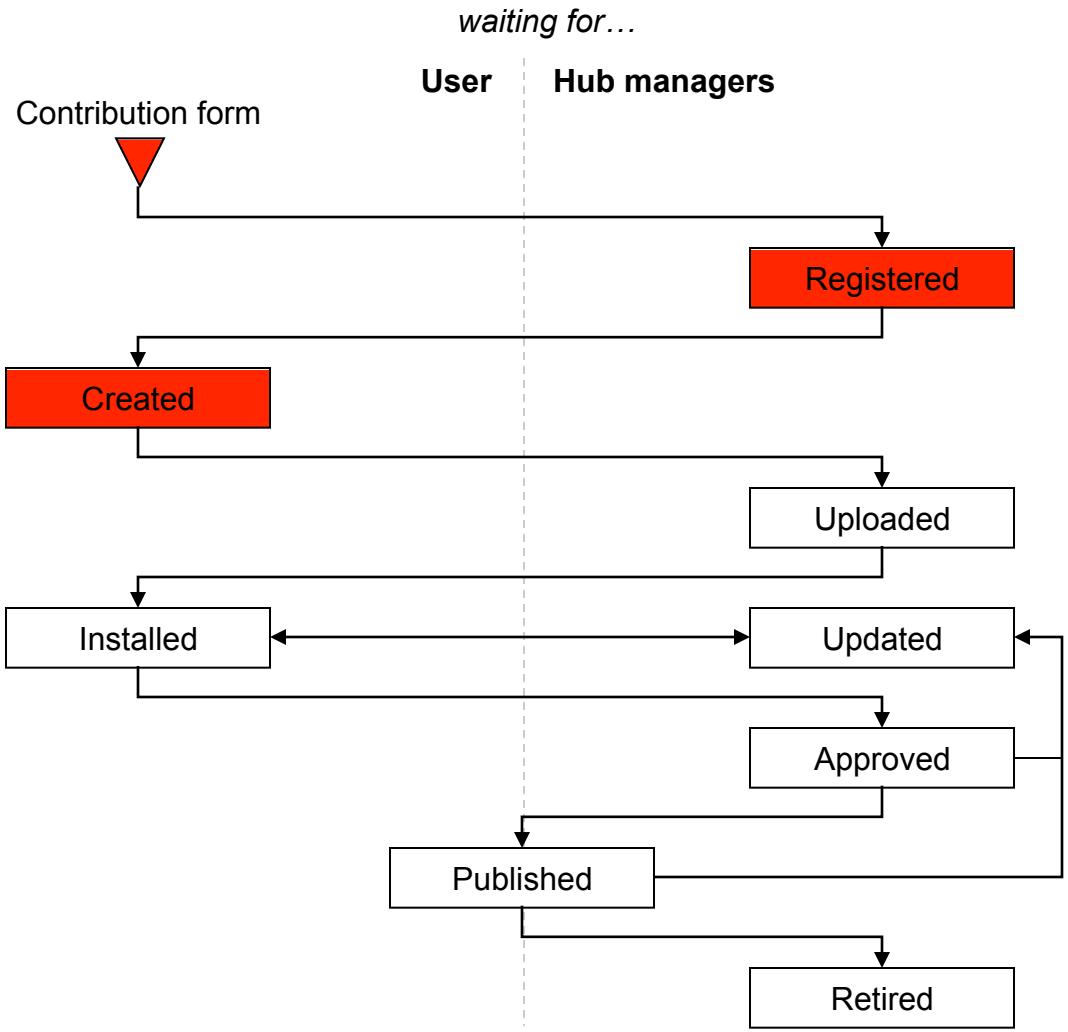
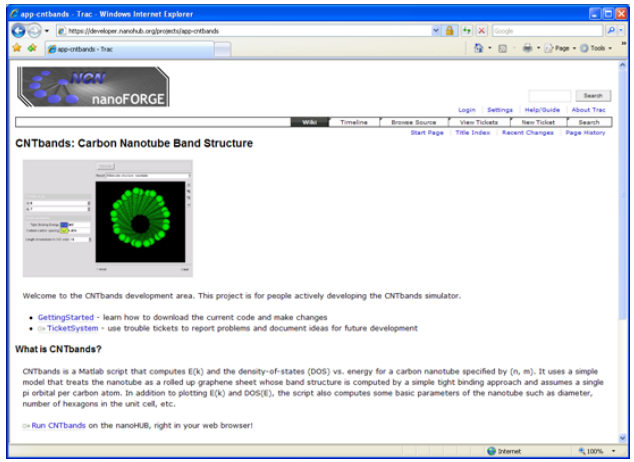
Tool development process



https://yourhub.org/tools



Hub managers create a project area for your tool

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

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Your project area

app-cntbands - Trac - Windows Internet Explorer

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

app-cntbands - Trac

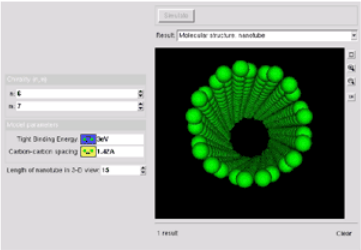
NCN nanoFORGE

Login | Settings | Help/Guide | About Trac

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

Start Page | Title Index | Recent Changes | Page History

CNTbands: Carbon Nanotube Band Structure



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!

Internet | 100%

Login | Se

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

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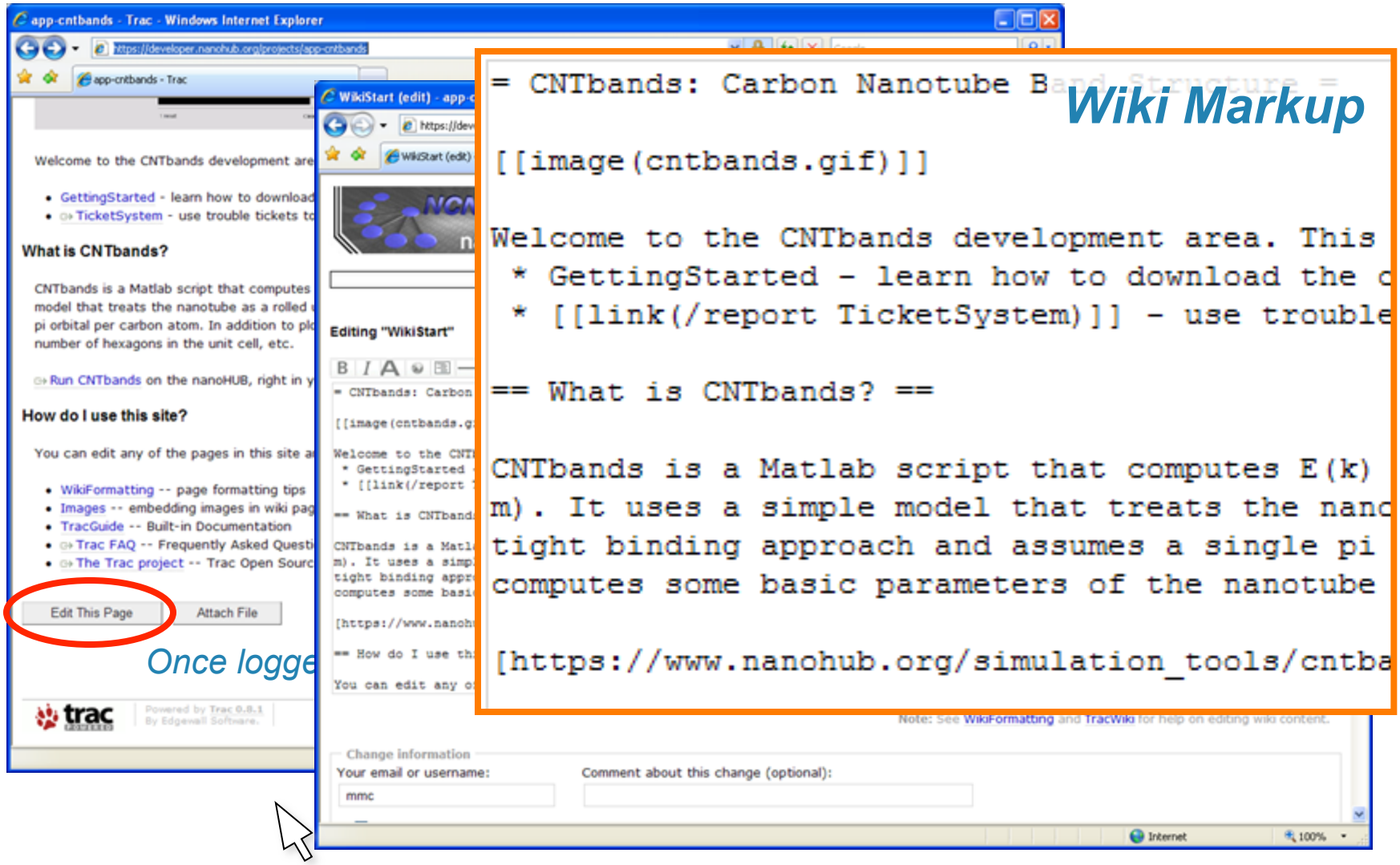
Editing wiki pages



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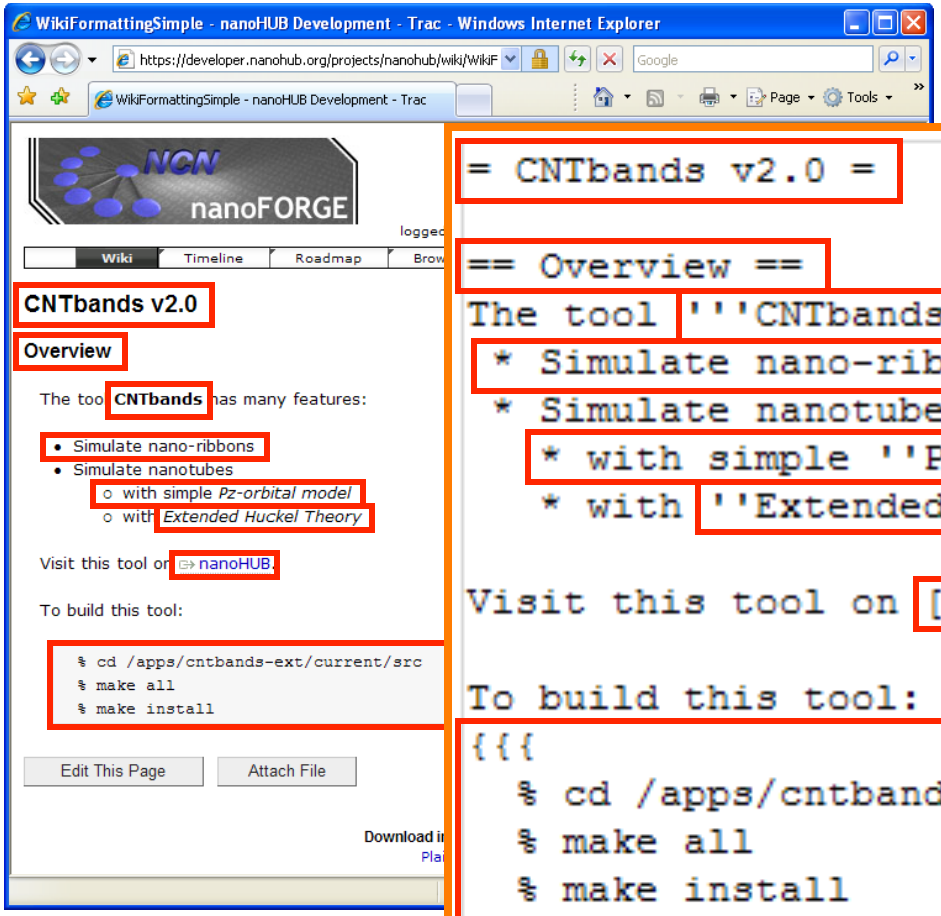
Wiki mark-up



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
}}}
```

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Linking wiki pages

CNTbands v2.0

Overview

The tool **CNTbands** has many feat

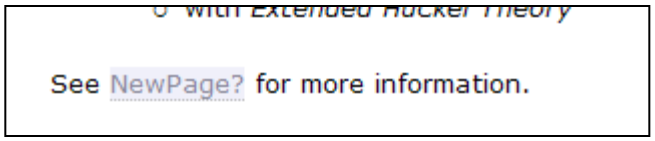
- Simulate nano-ribbons
- Simulate nanotubes
  - with simple *Pz-orbital mo*
  - with *Extended Huckel Th*

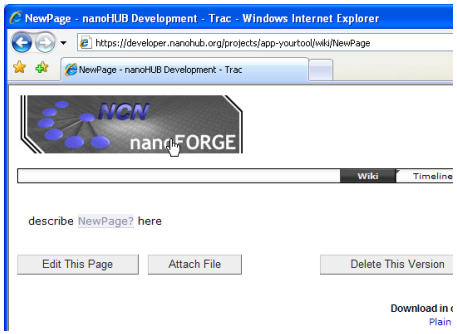
See NewPage for more information.

```
  * with simple ''Pz-orbital model''
  * with ''Extended Huckel Theory''

See NewPage for more information.

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

Any word with mixed case is treated as a link

Click on any link? to create that page:





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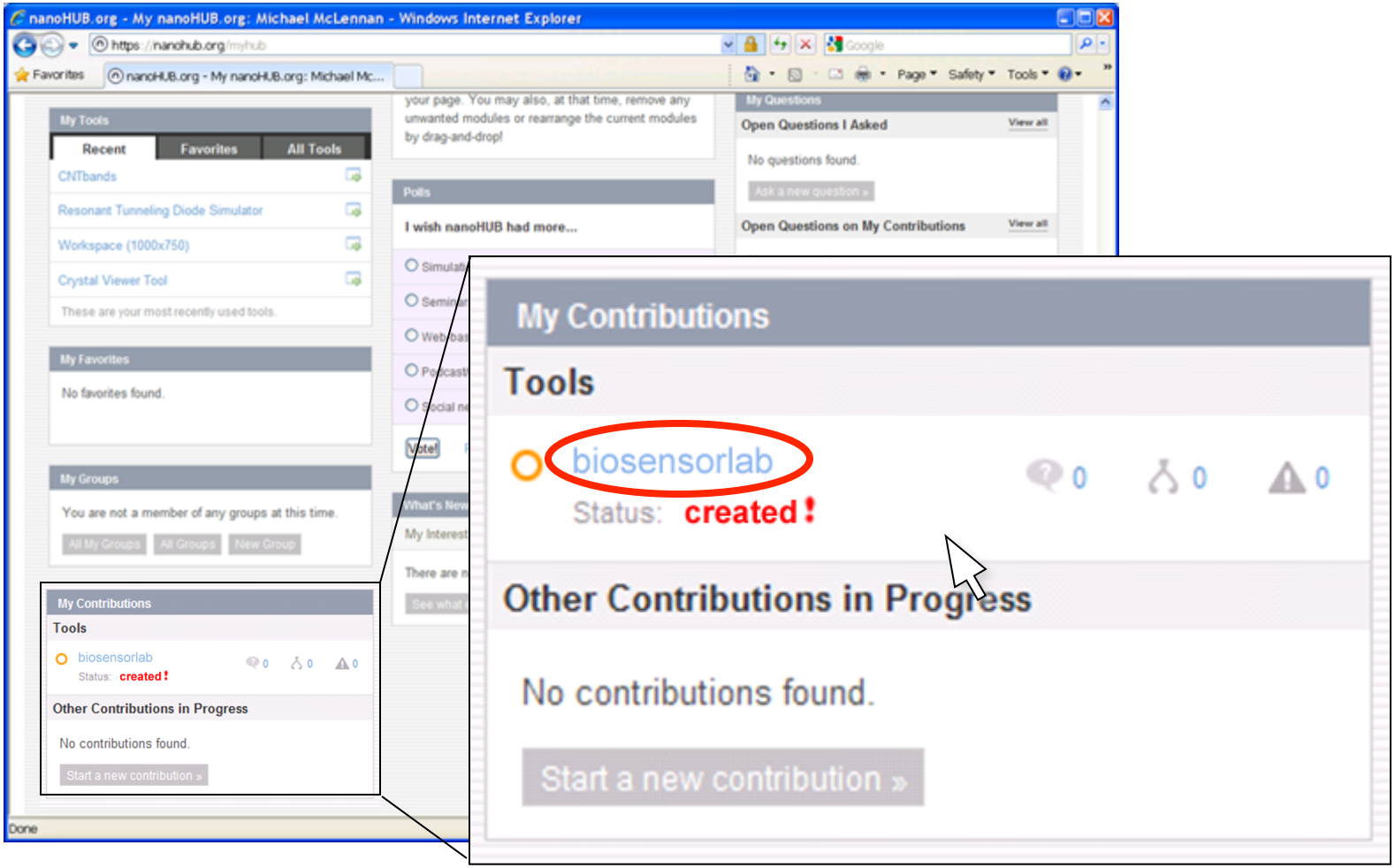
What's happening?



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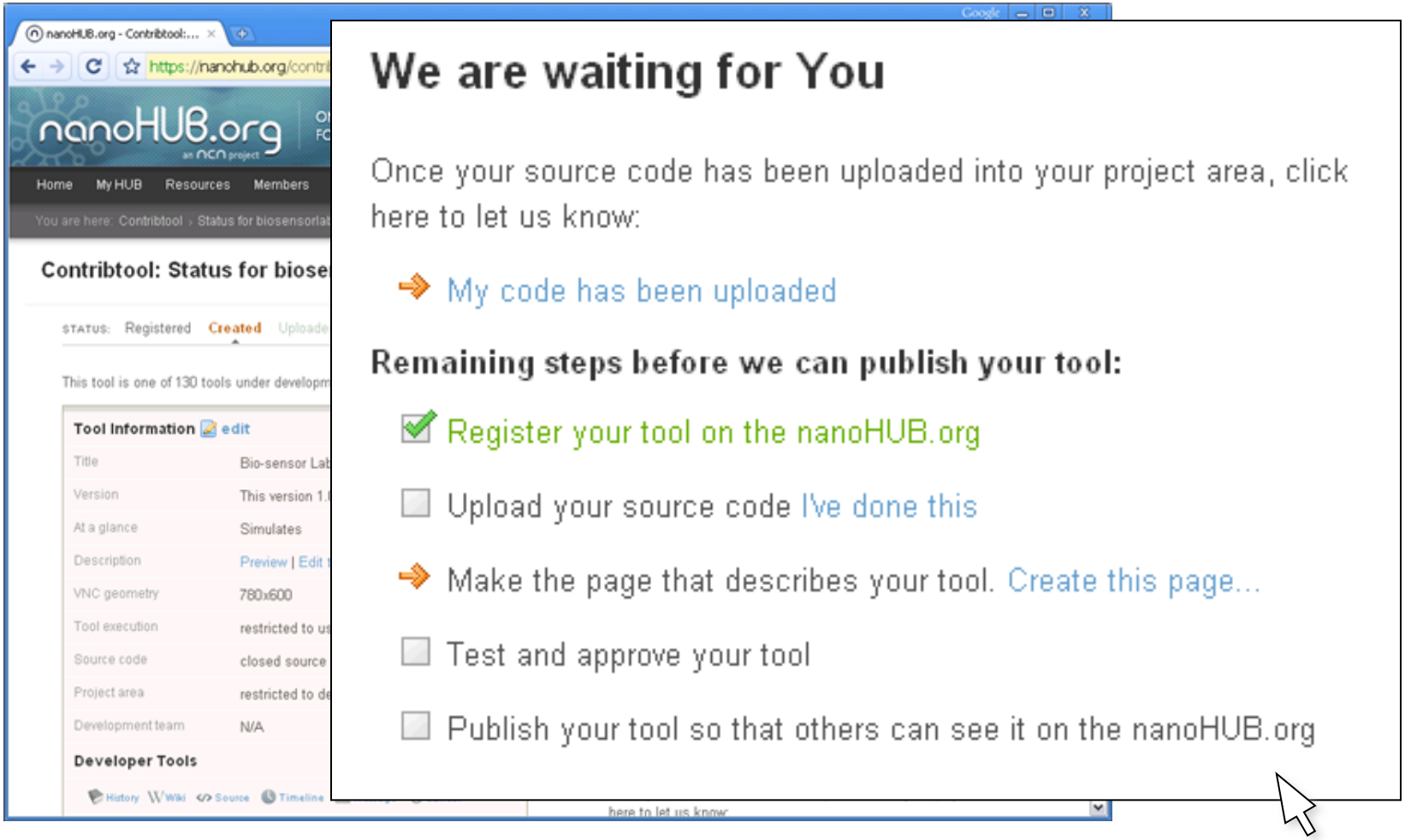
Know where you stand



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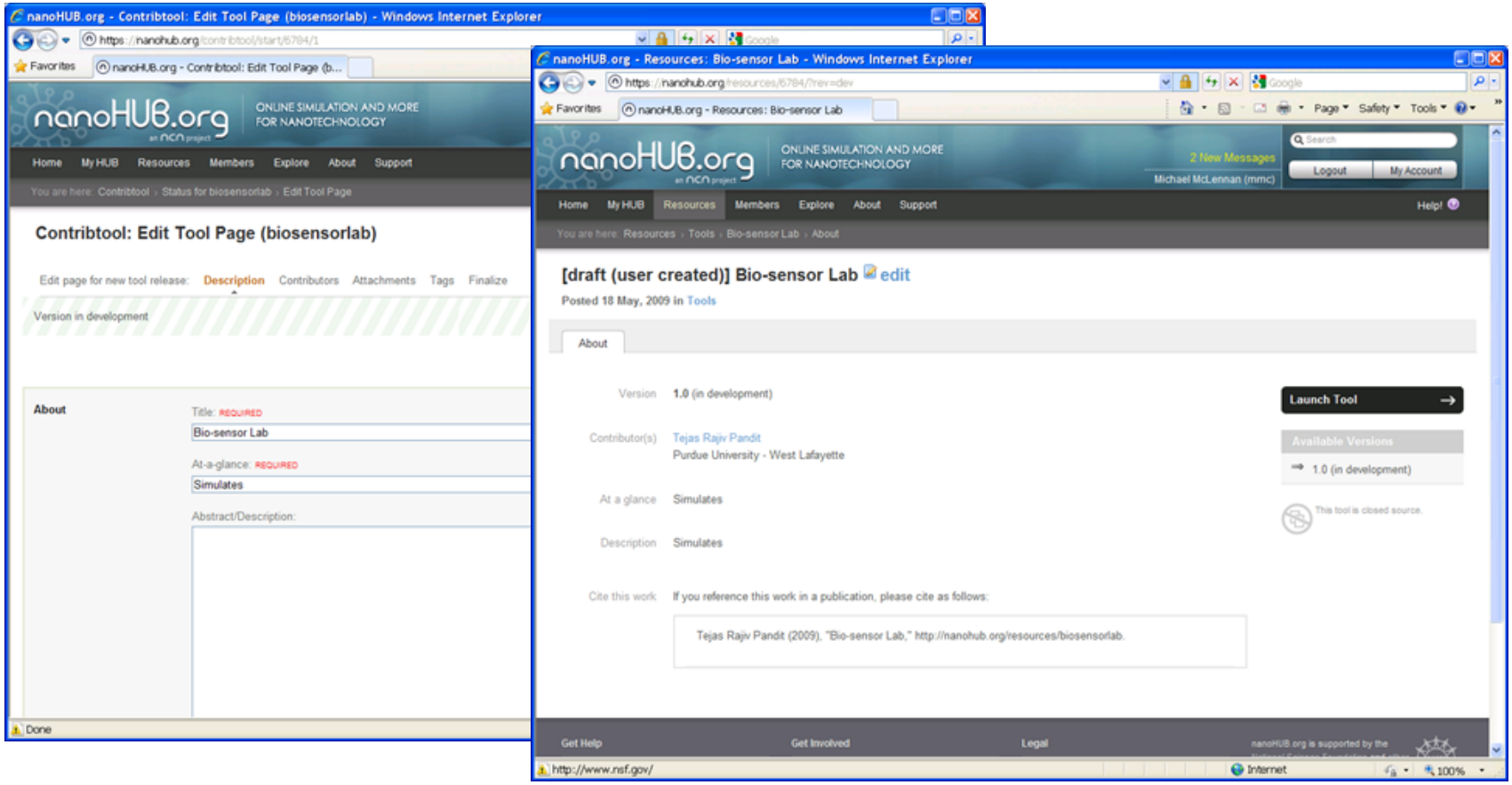
Edit your tool information page



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

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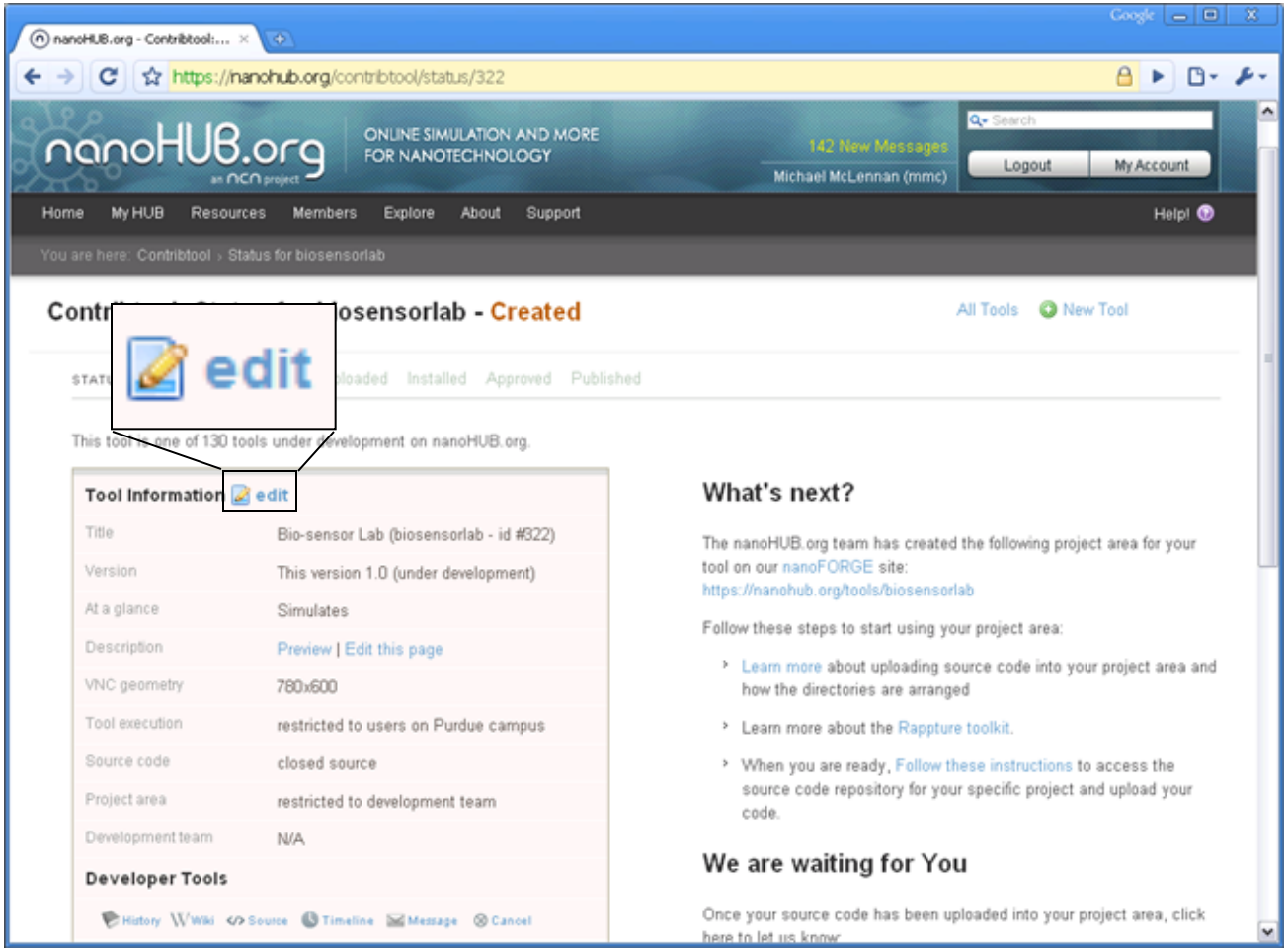
Know where you stand



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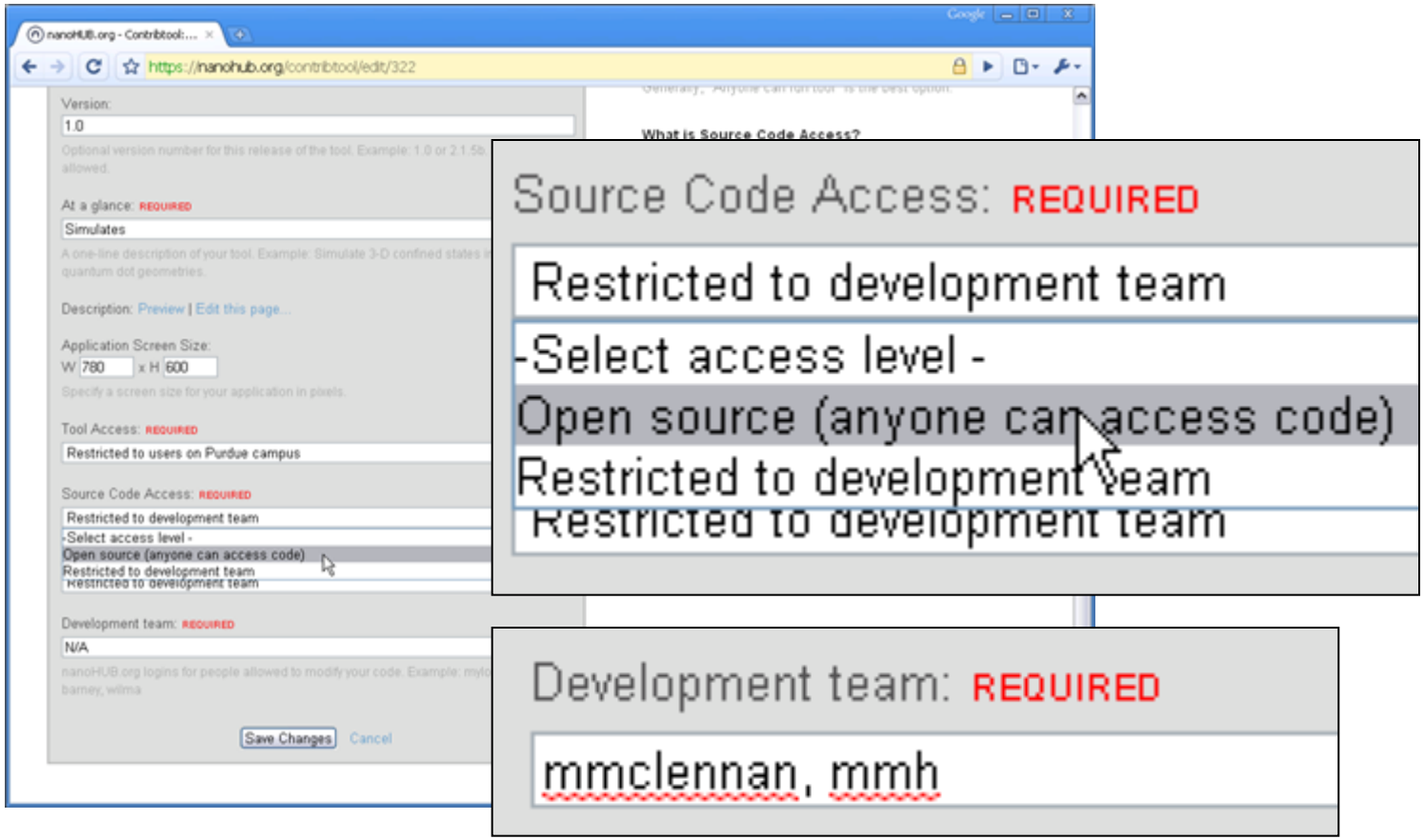
Edit your tool settings



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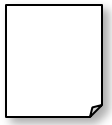
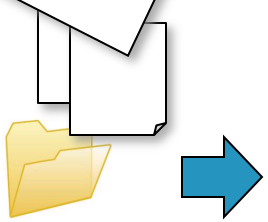
Putting out Open Source

```
/*
 * ==============================================
 * 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.
 * ==============================================
 */
...
```

www.opensource.org



license.terms



your code

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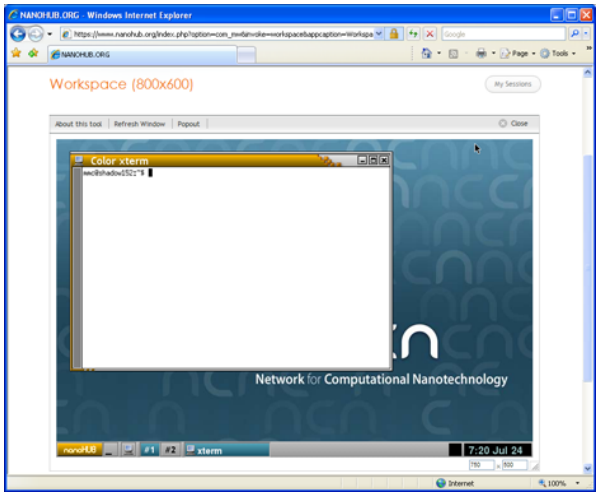
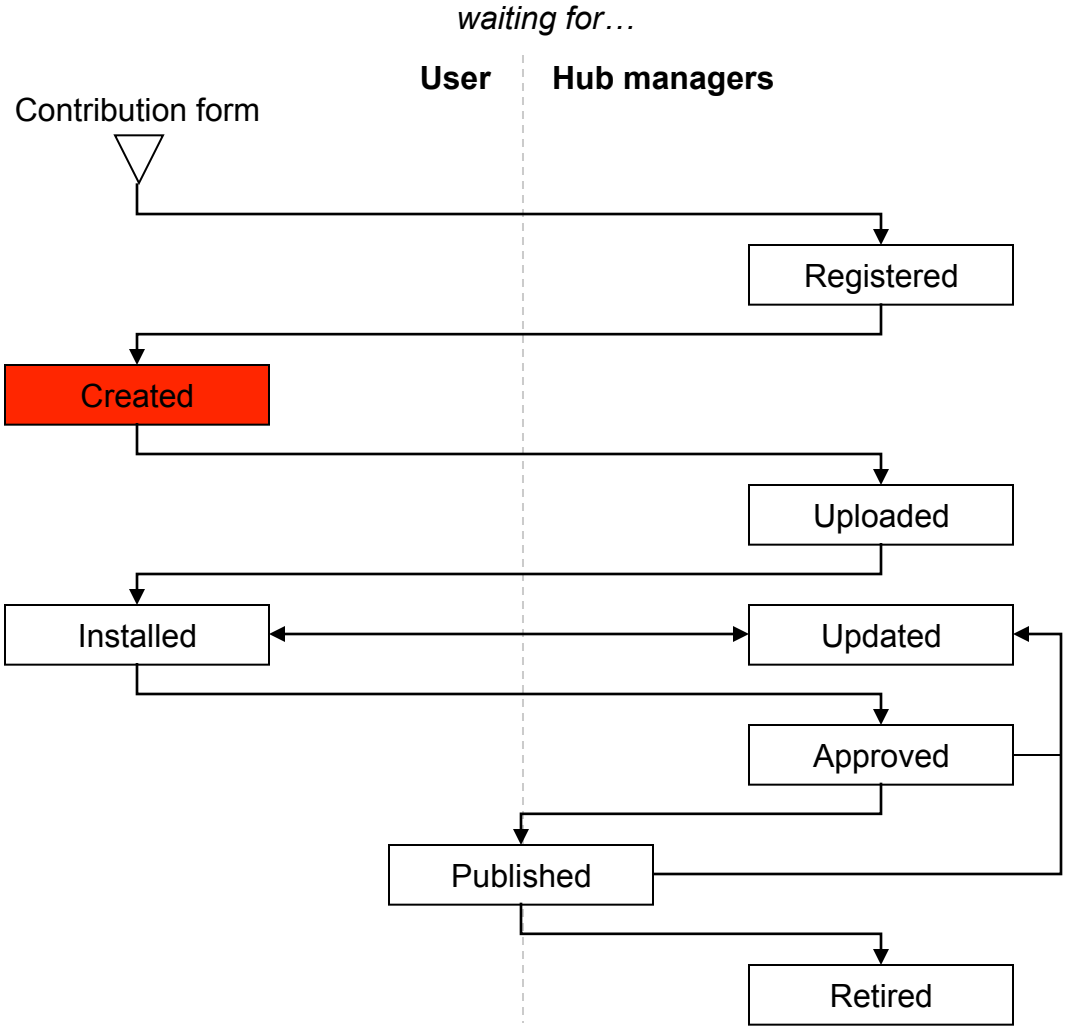
Uploading your code



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



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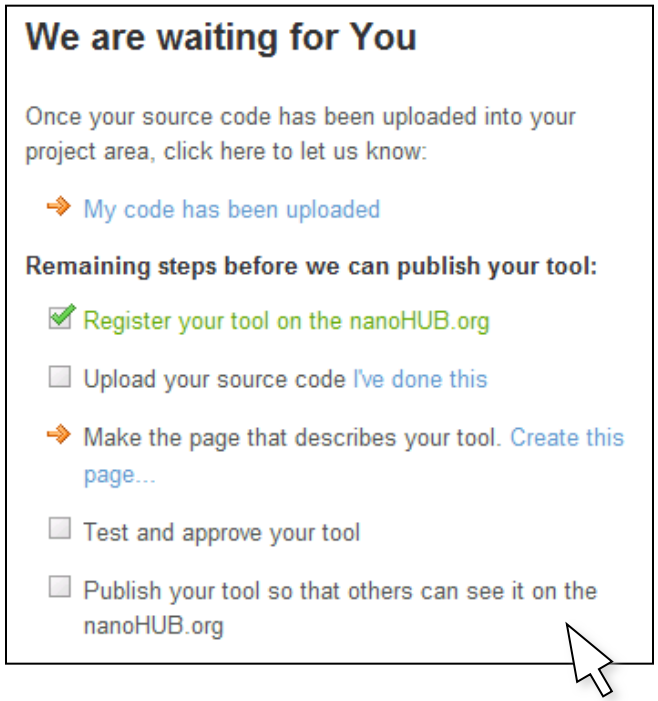
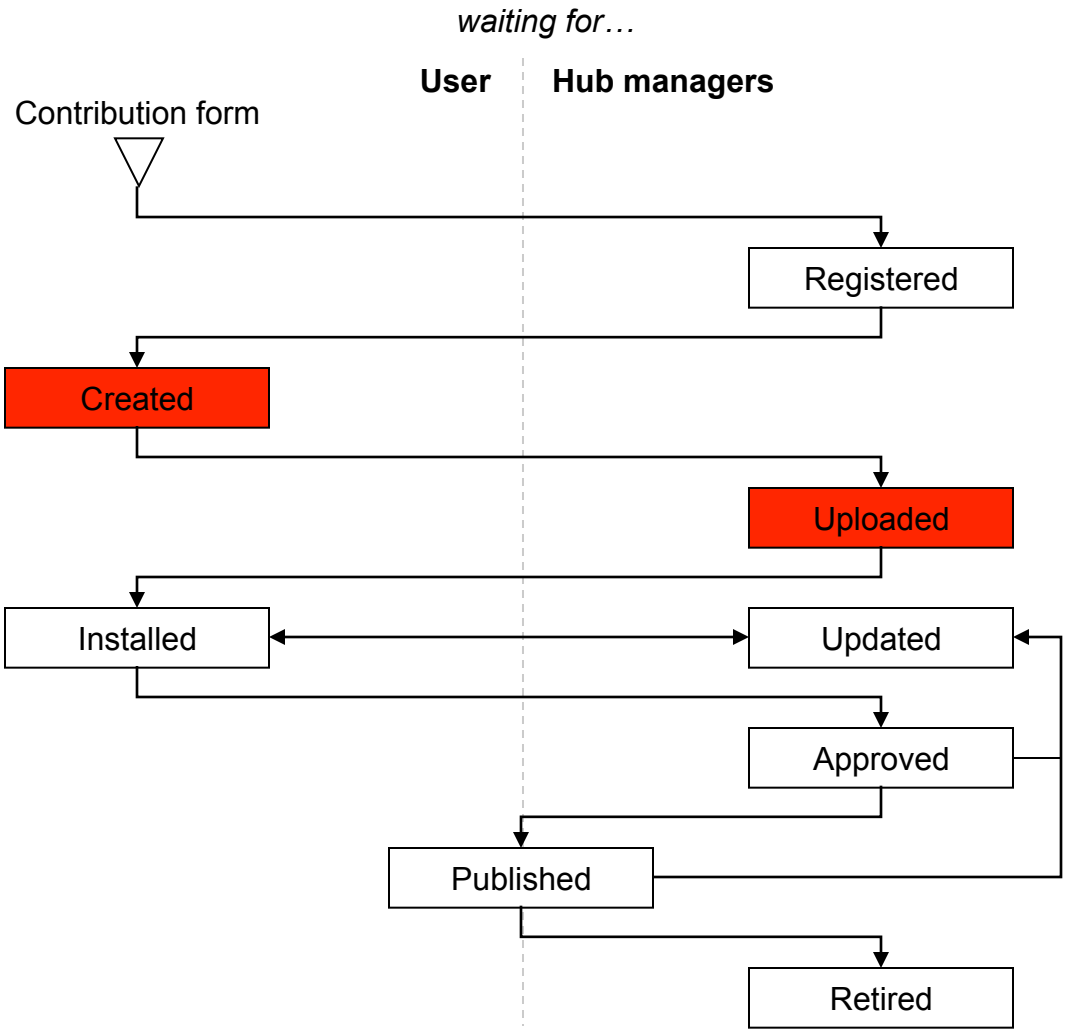
Uploading your code

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





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Testing your tool

What's next?

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

- Test your application:

  Launch tool →

- Review the page describing your tool

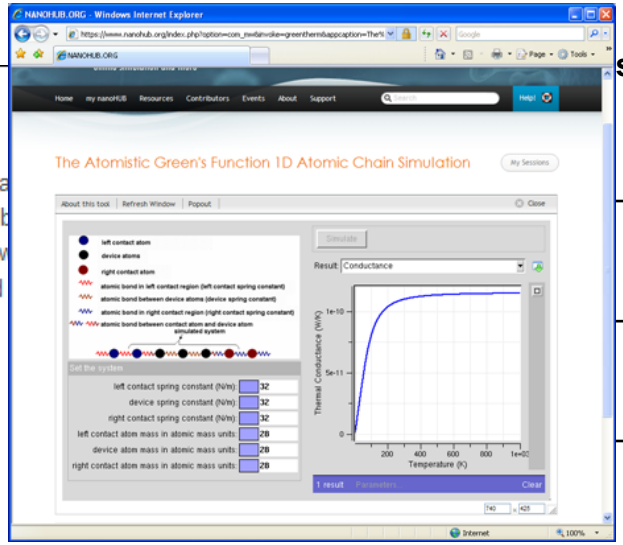
We are waiting for You

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.



waiting for…

ser | **Hub managers**

Registered

Uploaded

Installed

Updated

Approved

Published

Retired

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Testing your tool

What's next?

Your latest code is installed and ready on nanoHUB.org. Please test your tool by clicking the button below to mak 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:

  Launch tool →

- Review the page describing your tool

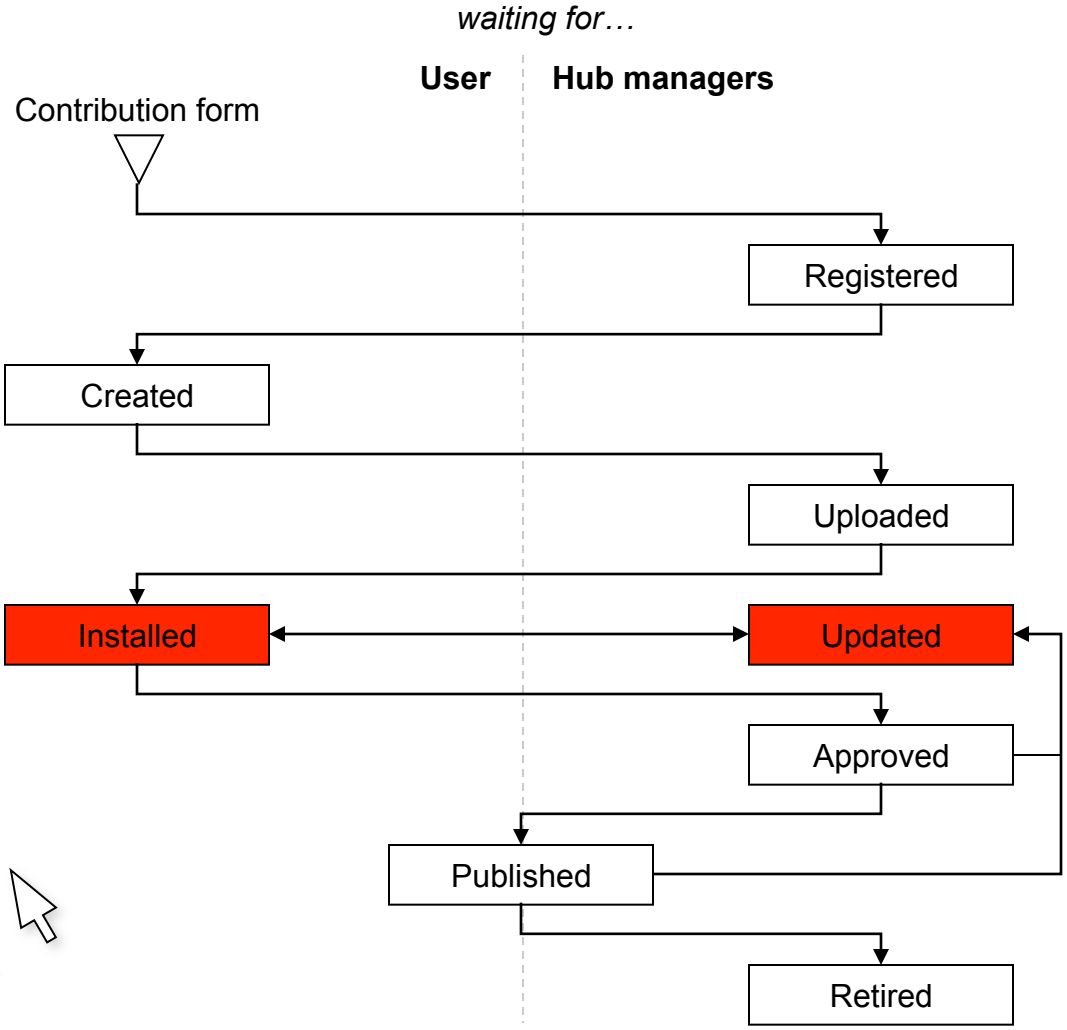
We are waiting for You

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.



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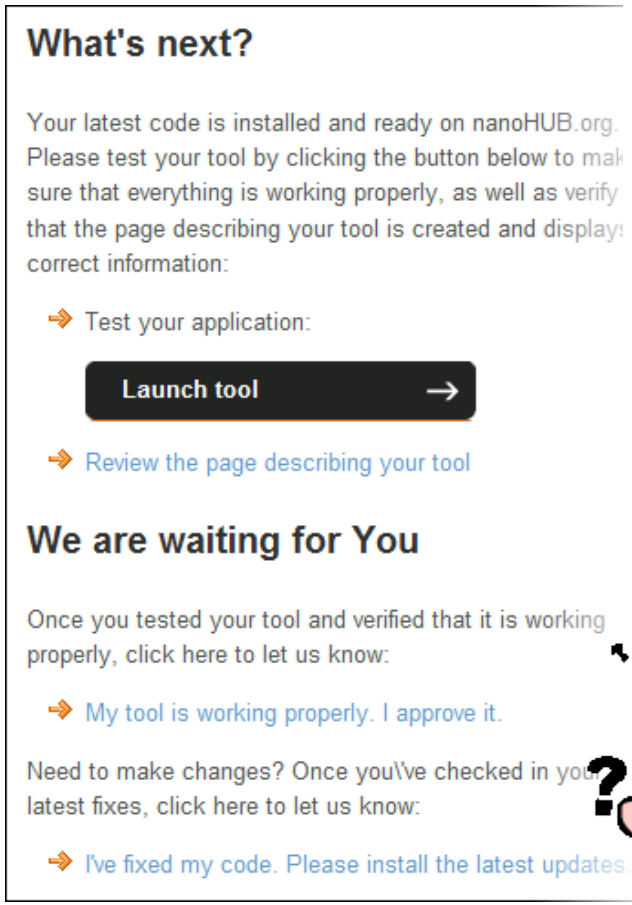
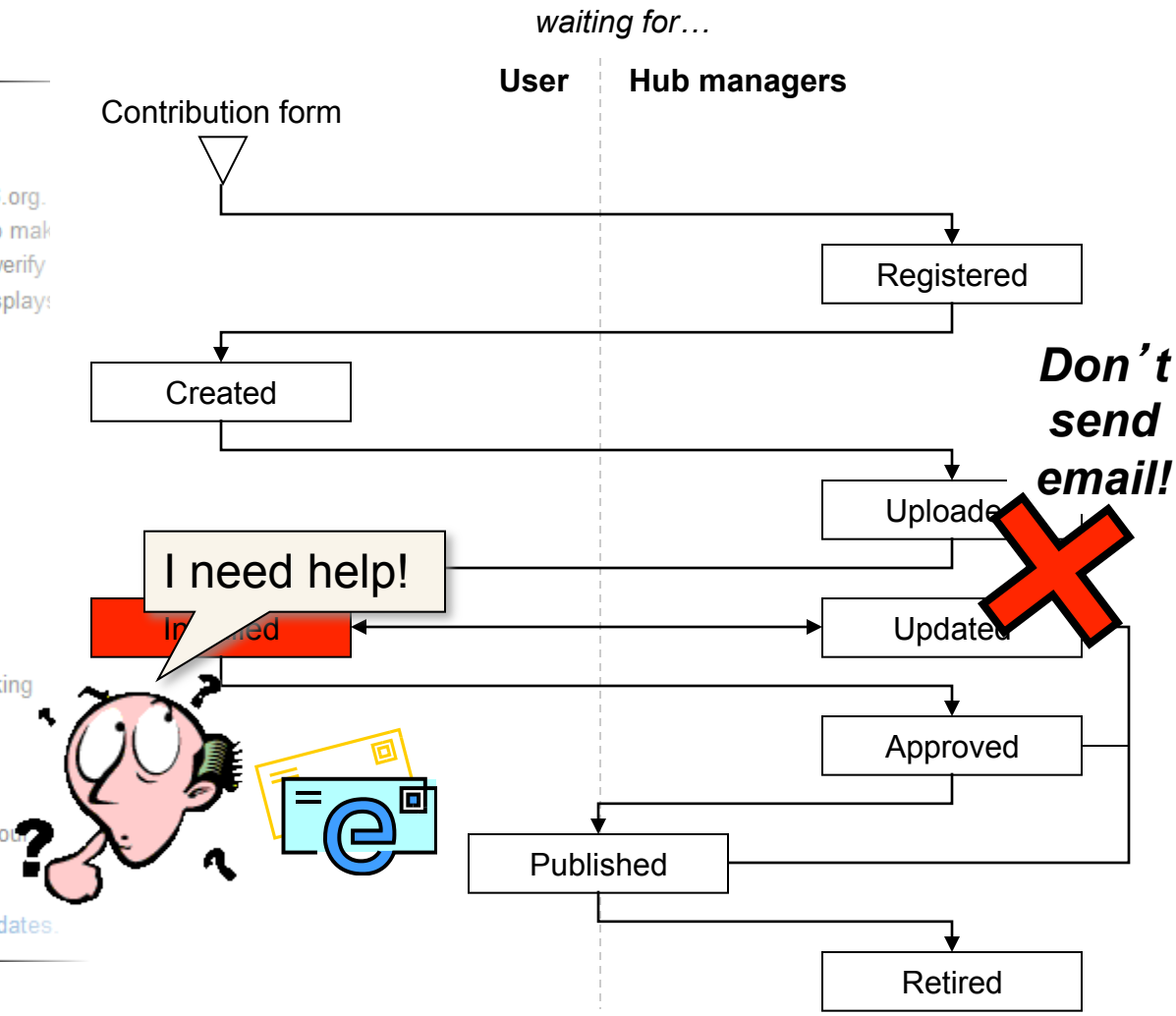
Need help?





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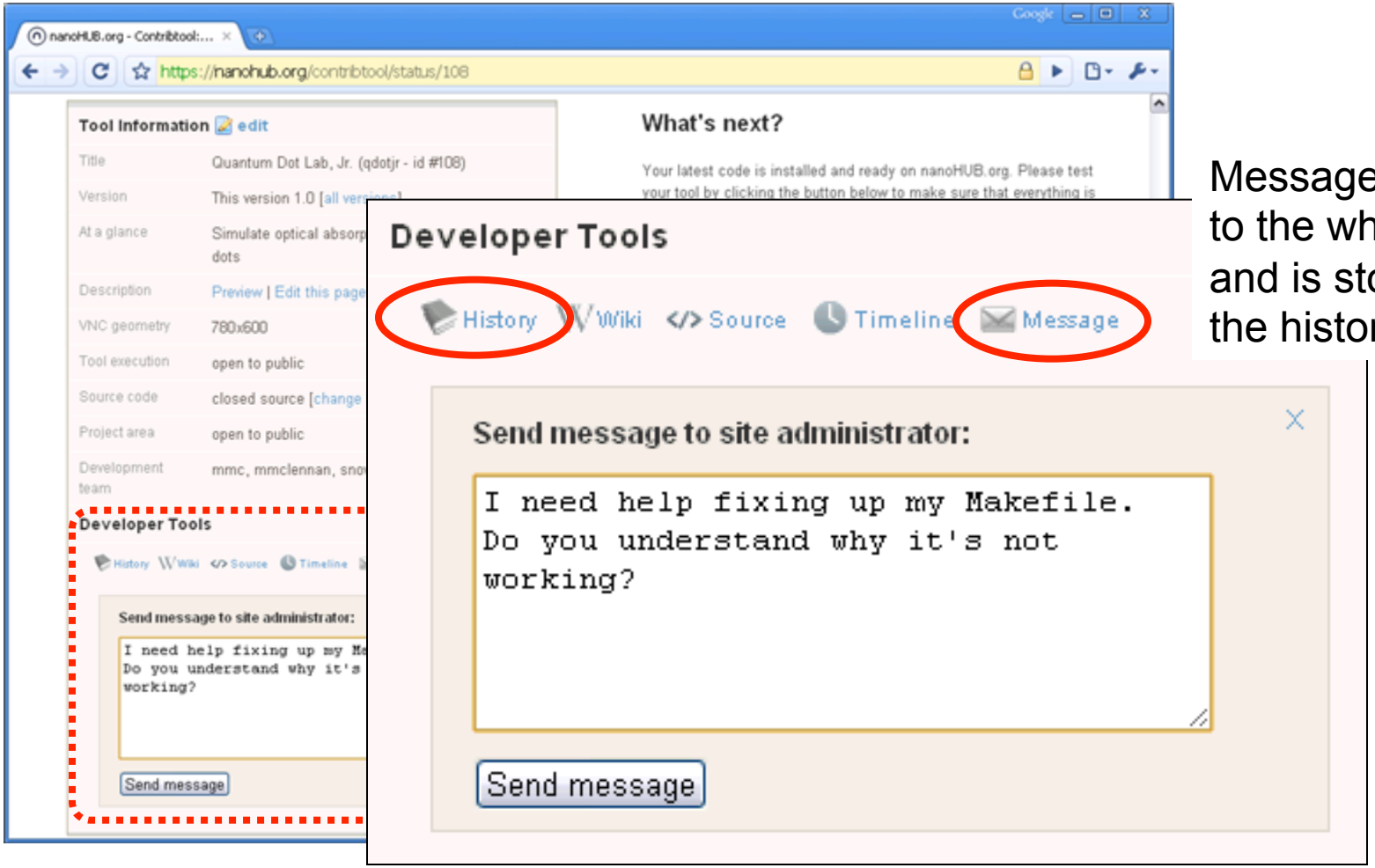
Use the web interface to communicate



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

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Testing your tool—again

What's next?

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

- Test your application:

  Launch tool →

- Review the page describing your tool

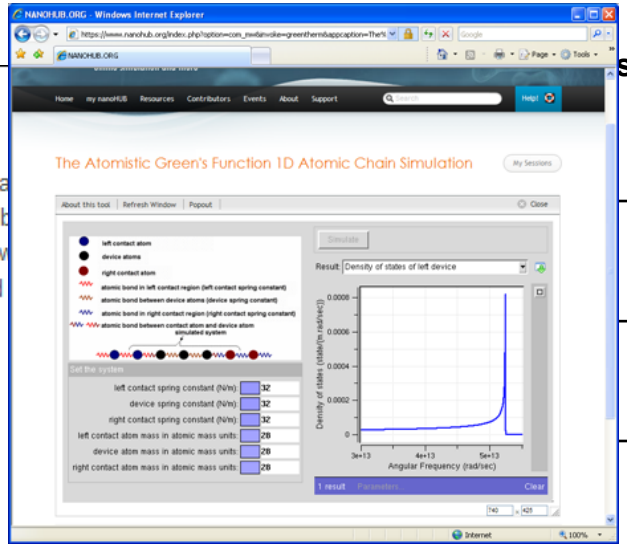
We are waiting for You

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.



waiting for…

ser | **Hub managers**

Registered

Uploaded

Installed

Updated

Approved

Published

Retired

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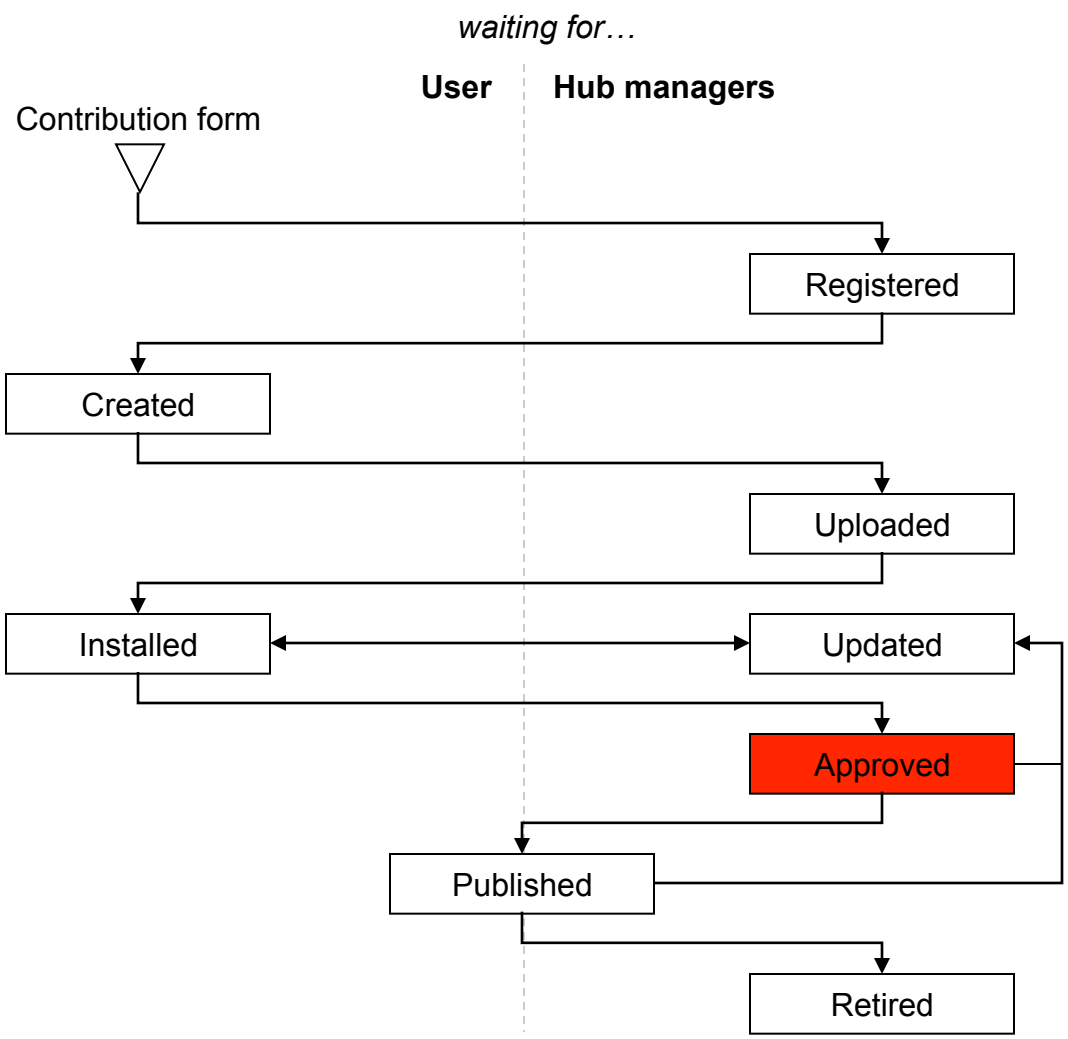
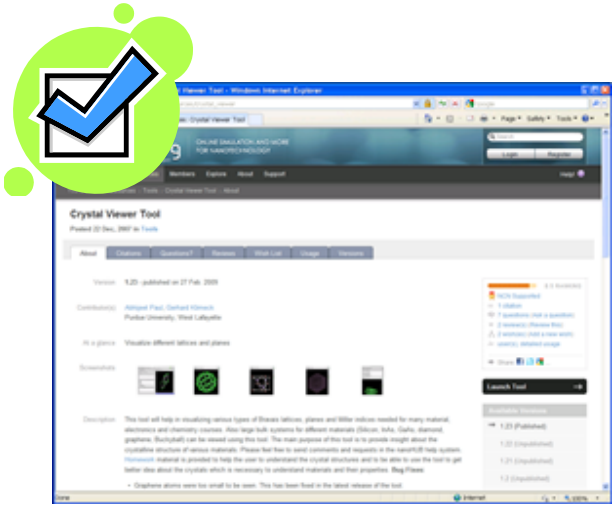
Last step…





Hub managers…

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

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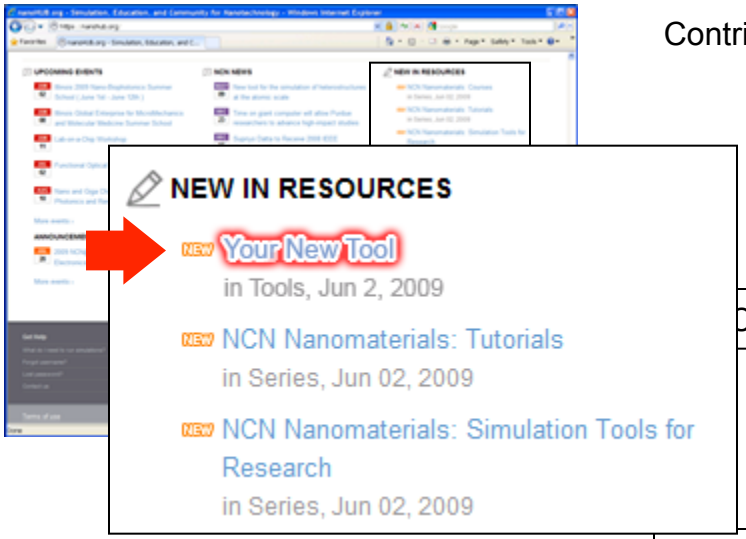
Your tool is published



waiting for…

User | **Hub managers**

Contribution form

Registered

Created

Uploaded

Installed

Updated

Approved

Published

Retired

If you want to make changes…

Your options:

- I've made changes Please install the latest updates

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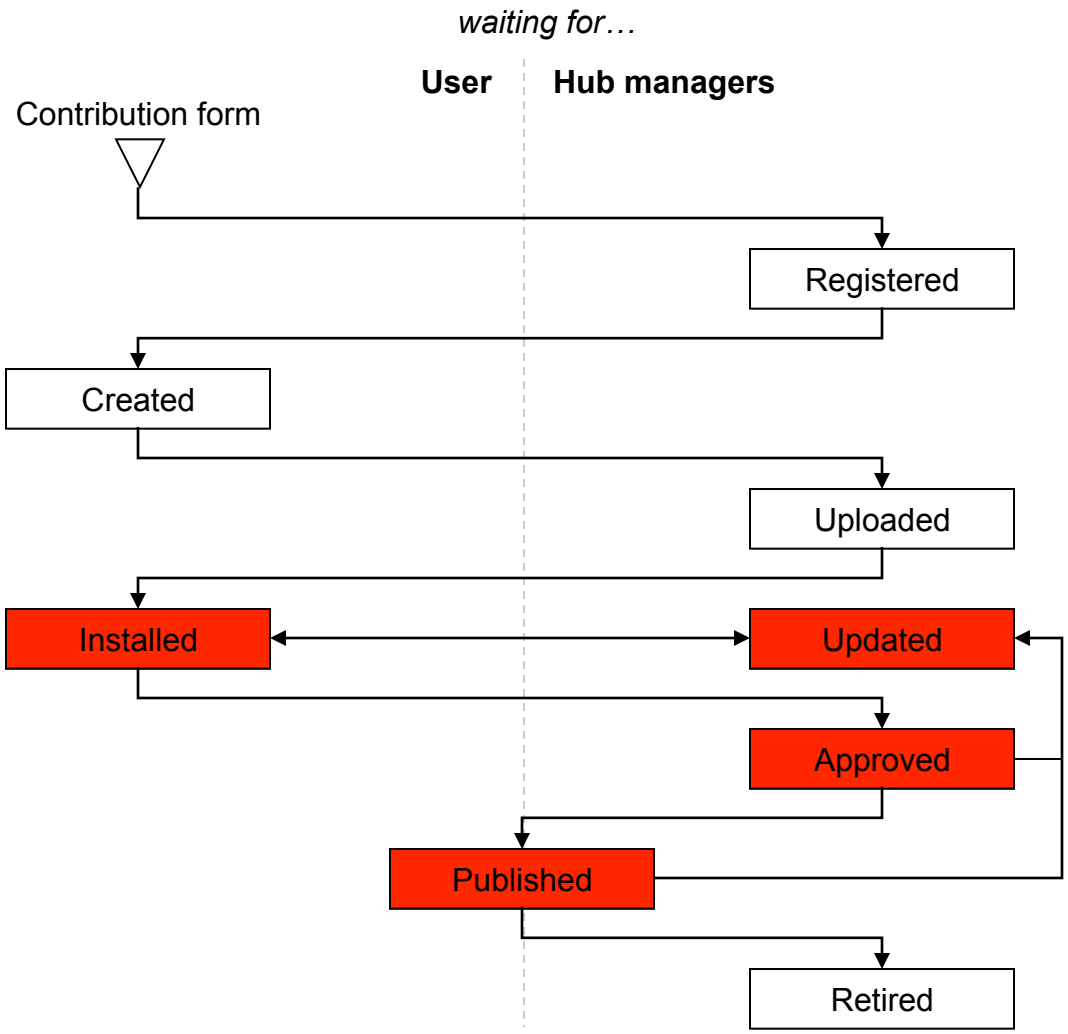
Updating your tool



Re-install your tool

You approve it

One last look

Your changes are published

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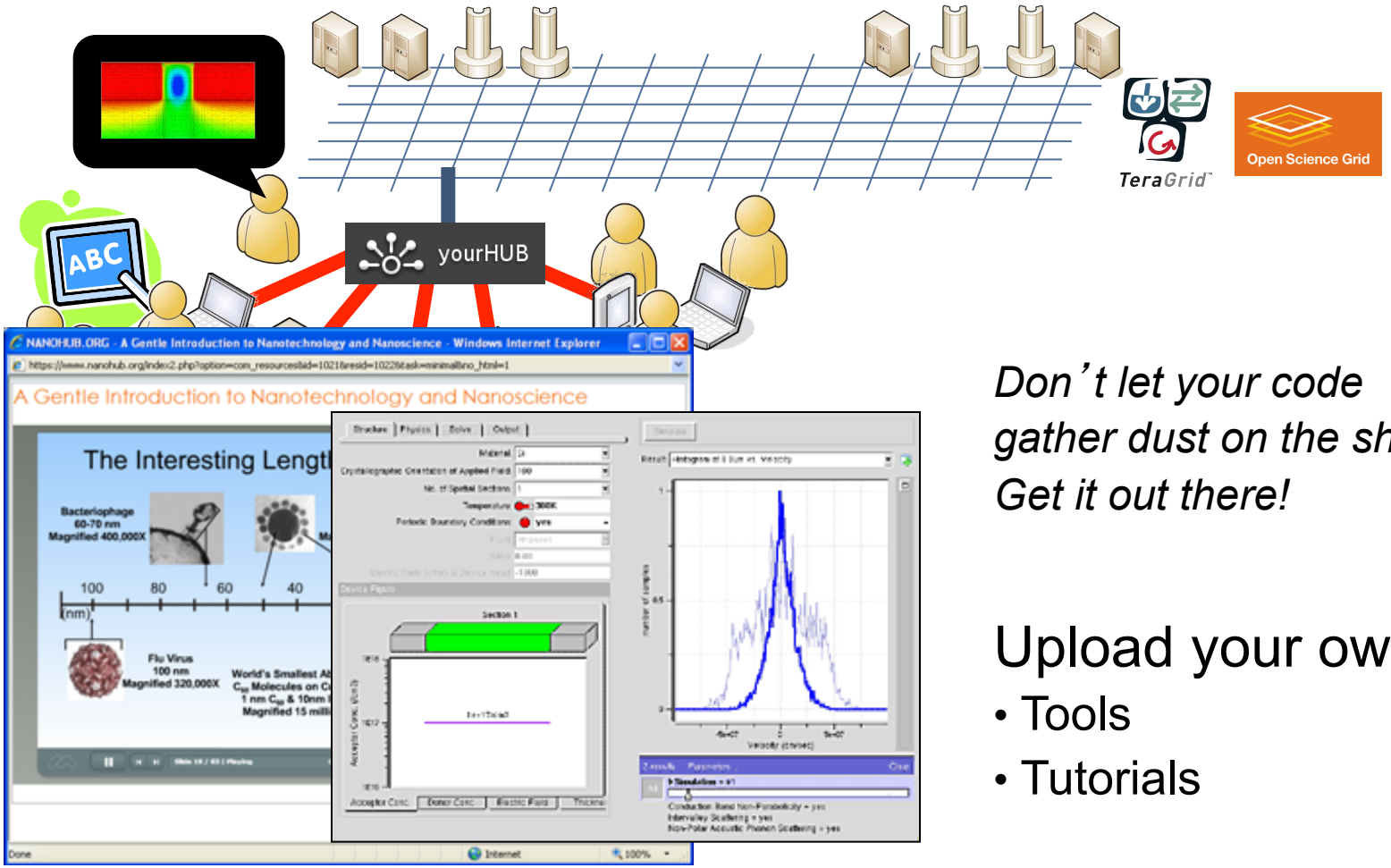
Become a Contributor



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

Upload your own:

- Tools
- Tutorials

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