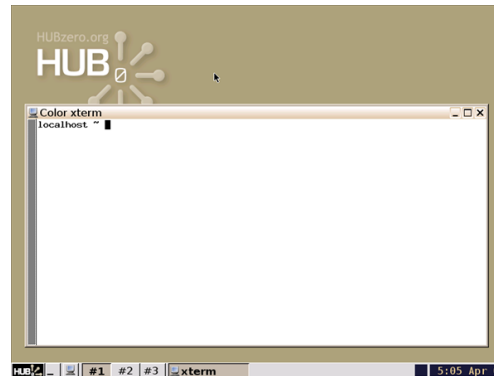


Using Simulation Workspaces



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Director, HUBzero® Platform for Scientific Collaboration
Purdue University

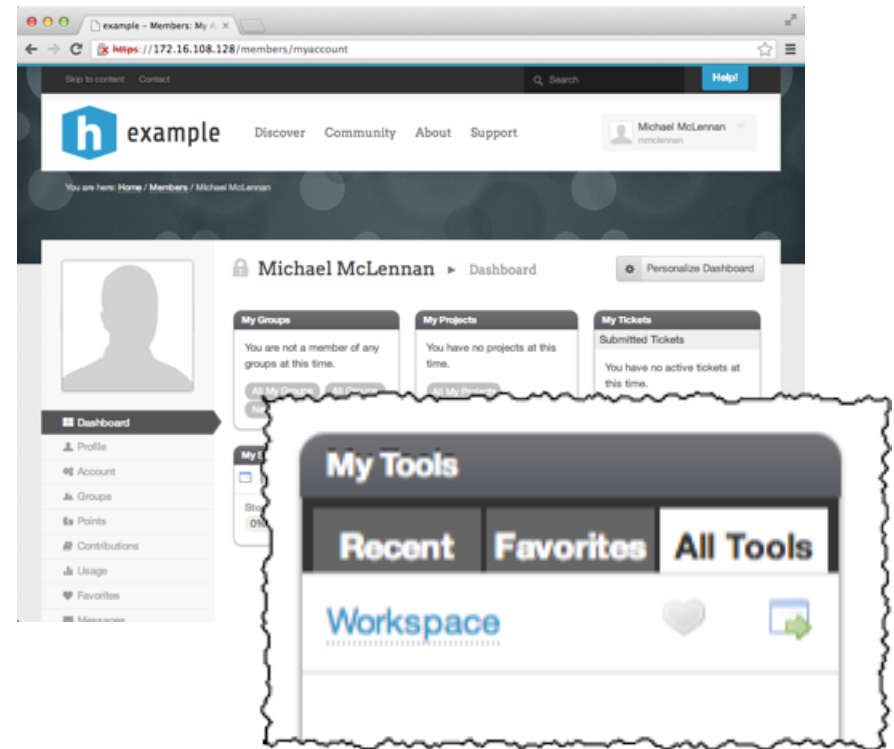
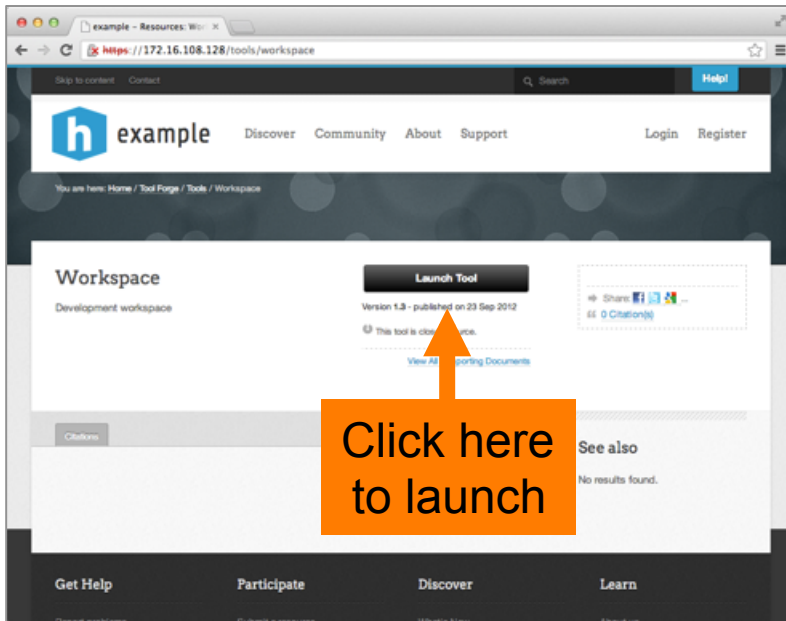
Launching workspaces



Hub Address

<http://xxx.xxx.xxx.xxx/tools/workspace>

Or find it on your dashboard:

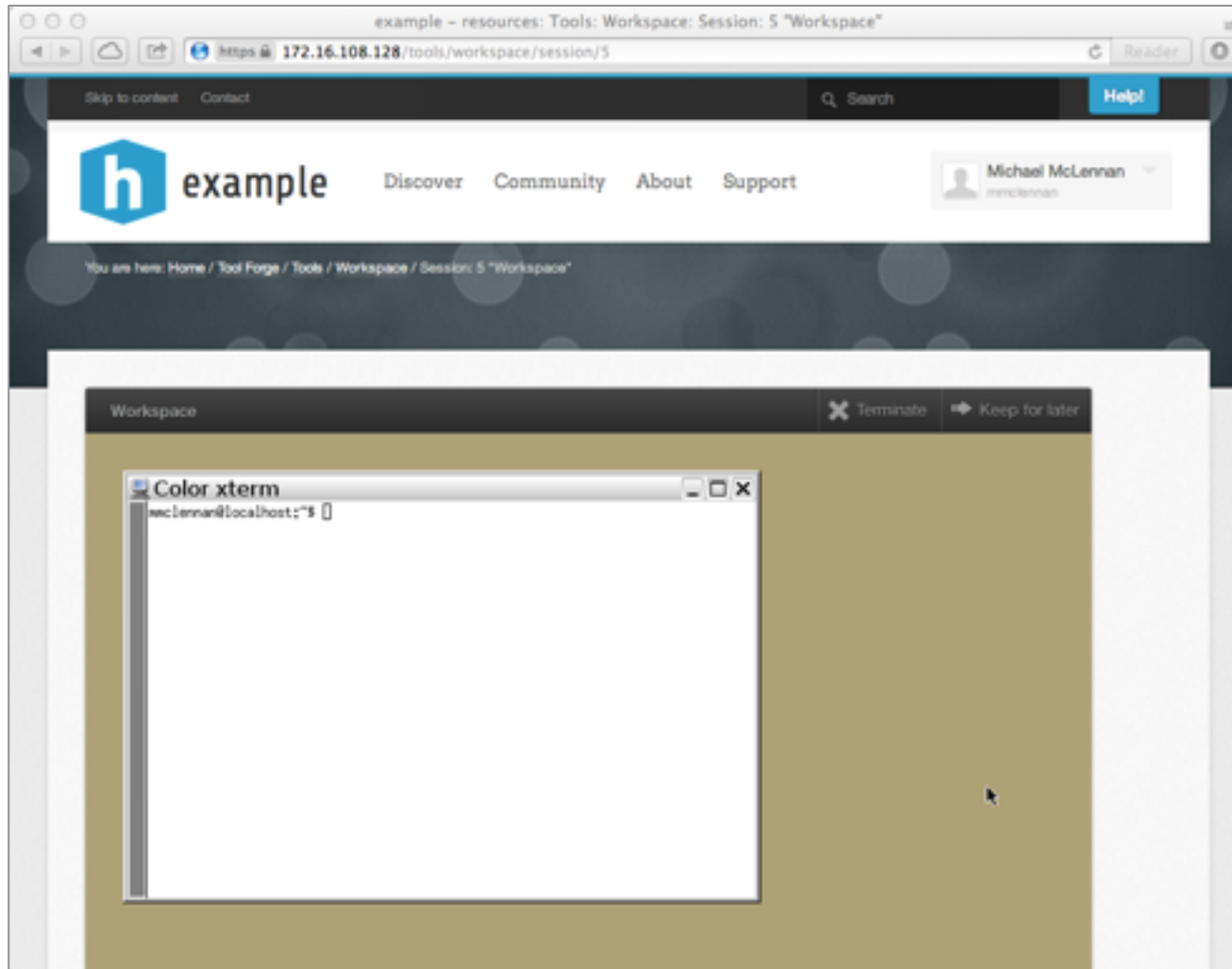


Java Warnings

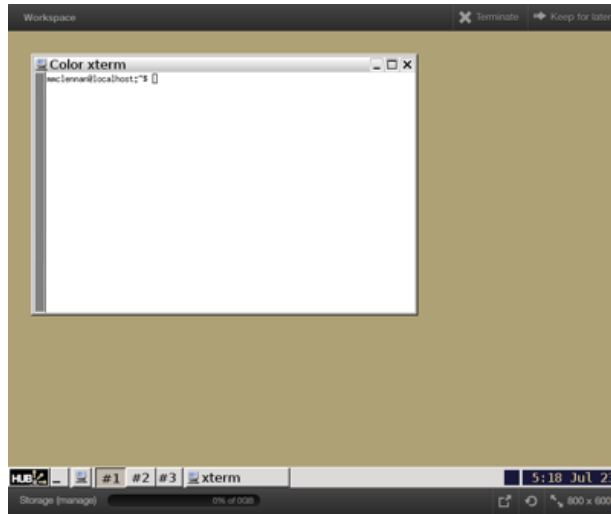


The image displays three overlapping security warning dialog boxes. The top-left dialog is from Safari, asking to allow a Java applet to load from the website "172.16.108.128". The middle dialog is a macOS "Security Warning" asking to run an unsigned application from the location "https://172.16.108.128/tools/workspace/session/". It includes a red warning icon, a "Run" button being clicked by a mouse cursor, and a "Cancel" button. The bottom dialog is another macOS "Security Warning" asking to continue with a connection to a website, featuring a yellow warning icon, a "Continue" button being clicked by a mouse cursor, and a "Cancel" button. A "Show Options" checkbox is also visible at the bottom left of this dialog.

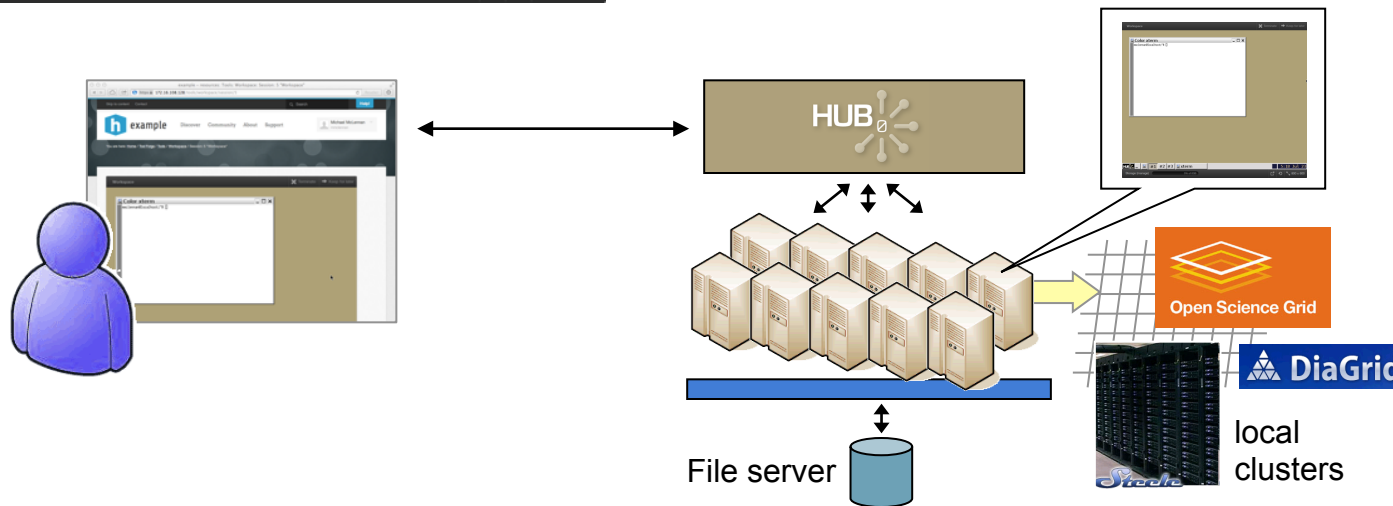
Success!



What is a workspace?



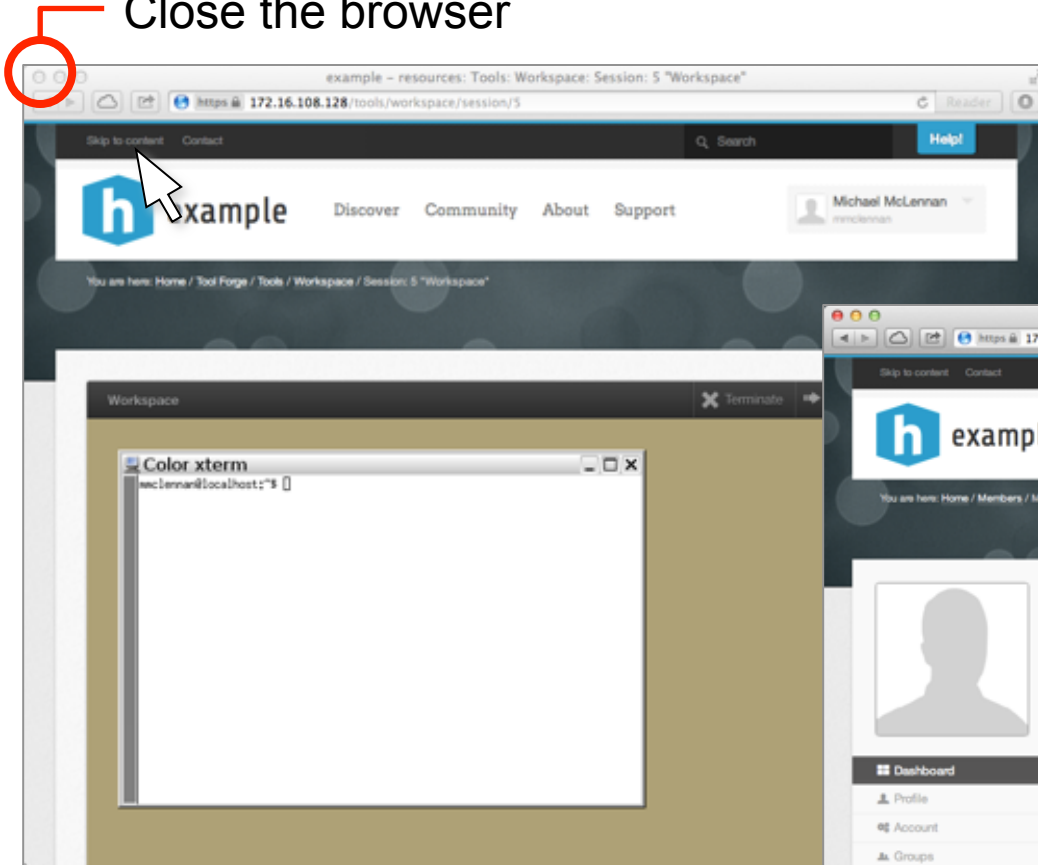
- Full-featured Linux desktop
- For tool developers
- For researchers
- Accessible from any web browser
- Still running after you close your browser
- Access to computational clusters
- File storage provided by the hub



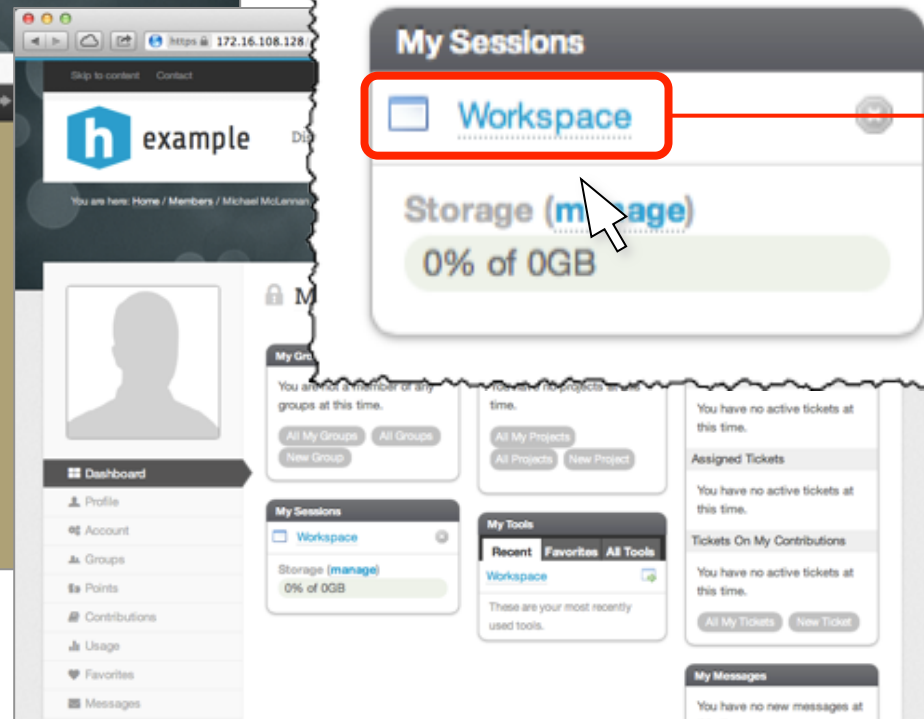
Accessing running workspaces



Close the browser



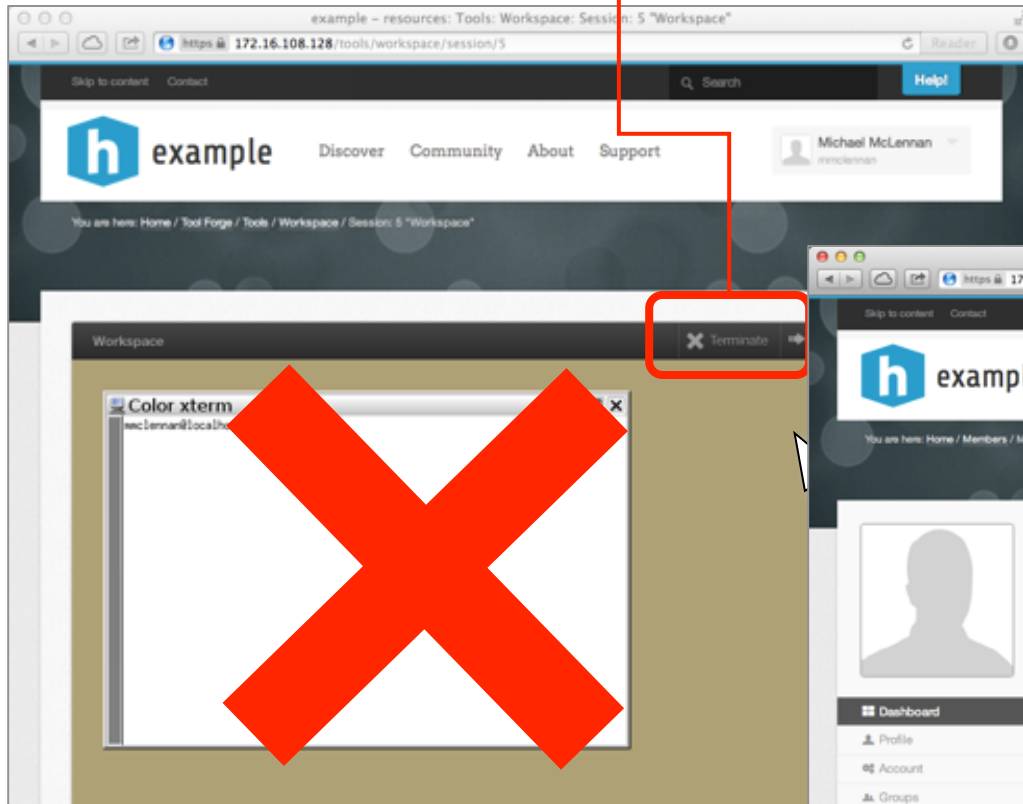
Still running, and listed under "my sessions"



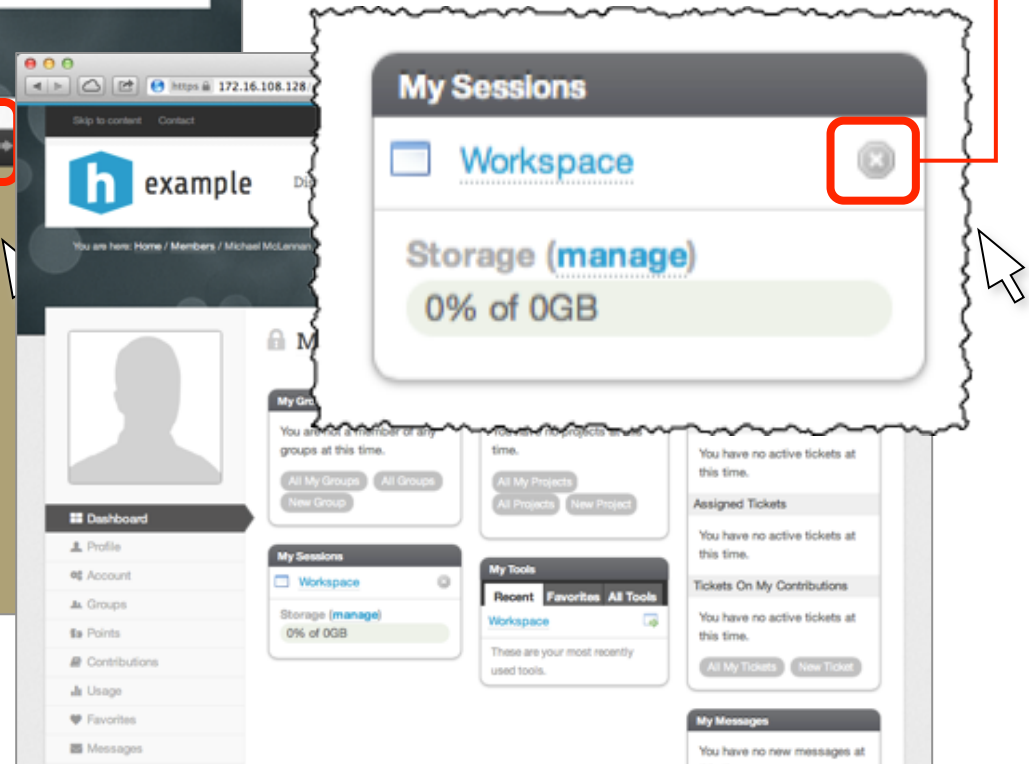
Closing workspaces



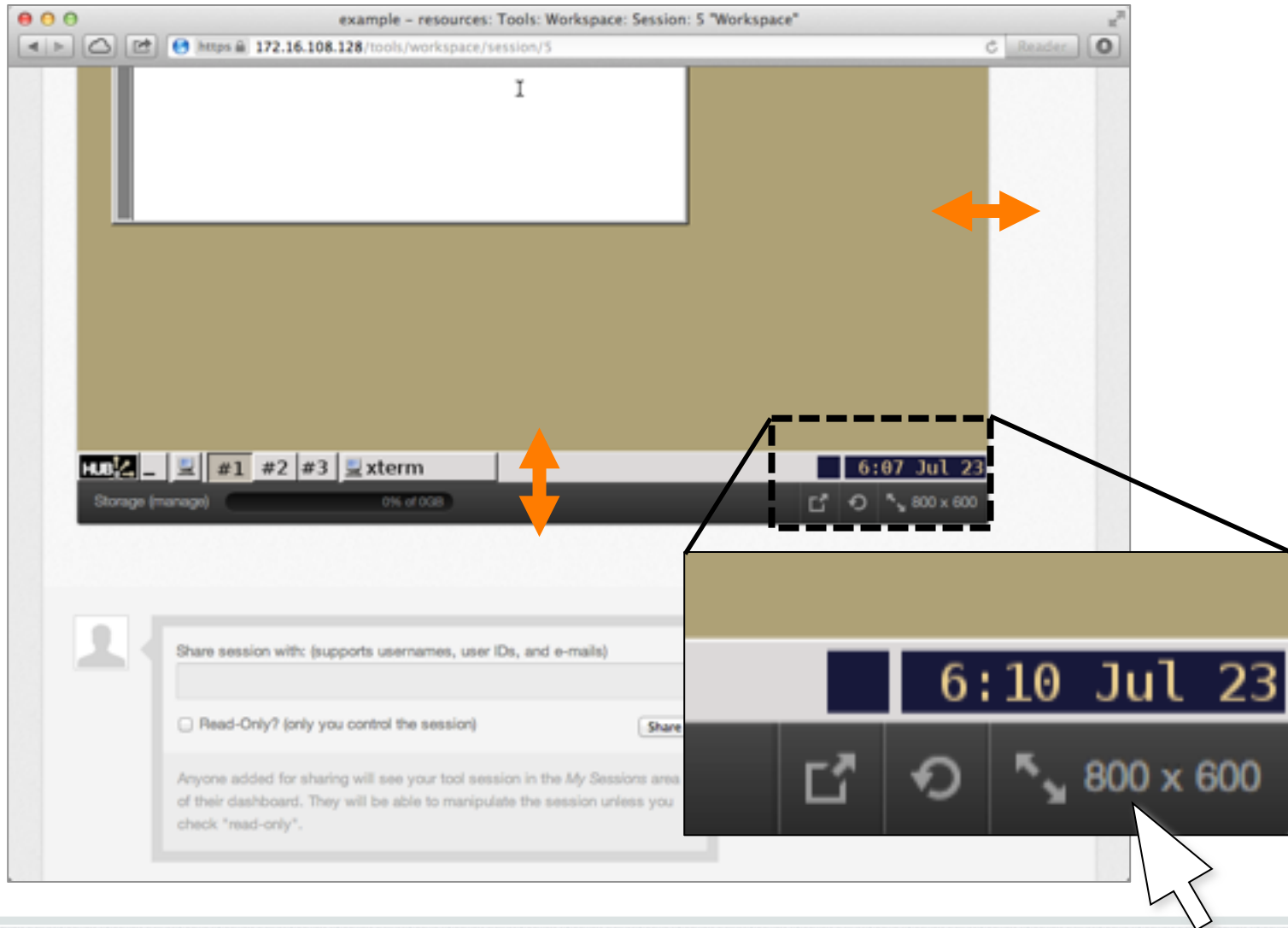
Click on "Terminate"



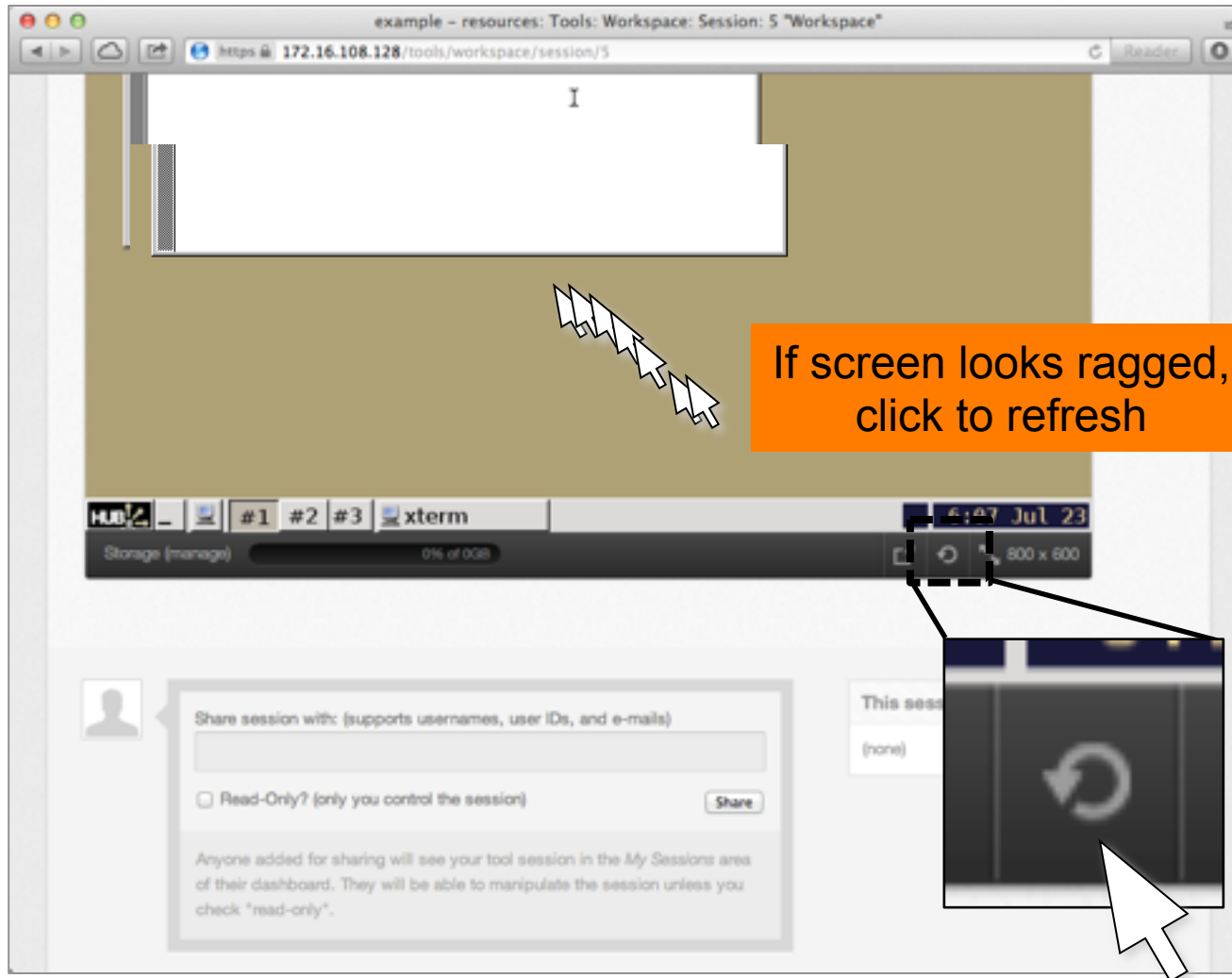
Click here to terminate



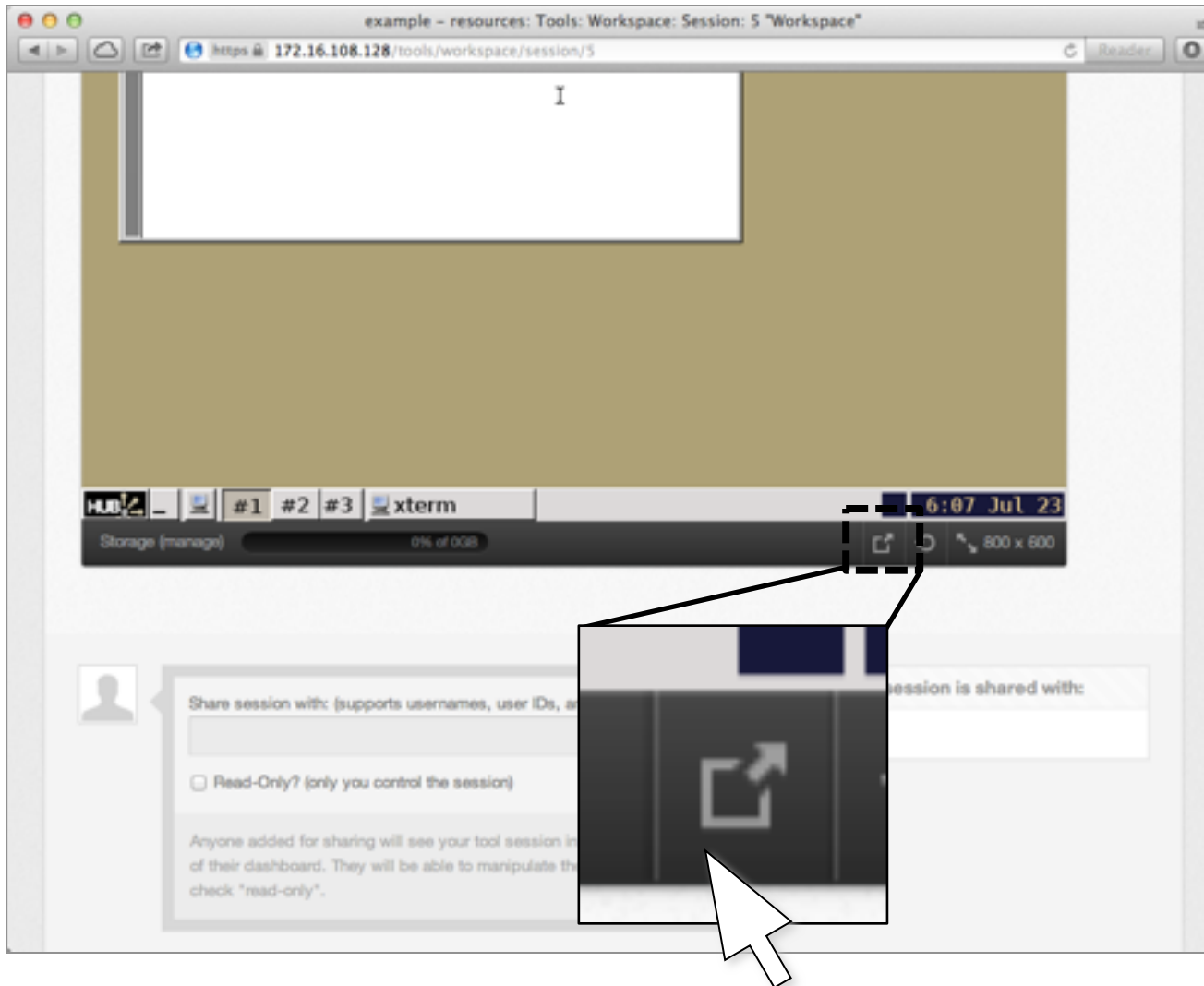
Resize the screen



Refresh the screen



Pop out as a separate window



Pop out as a separate window

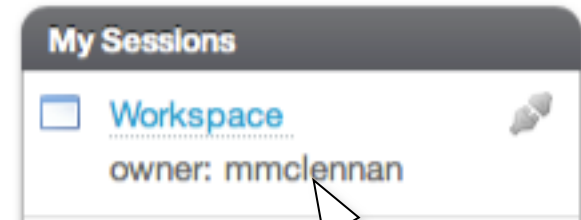
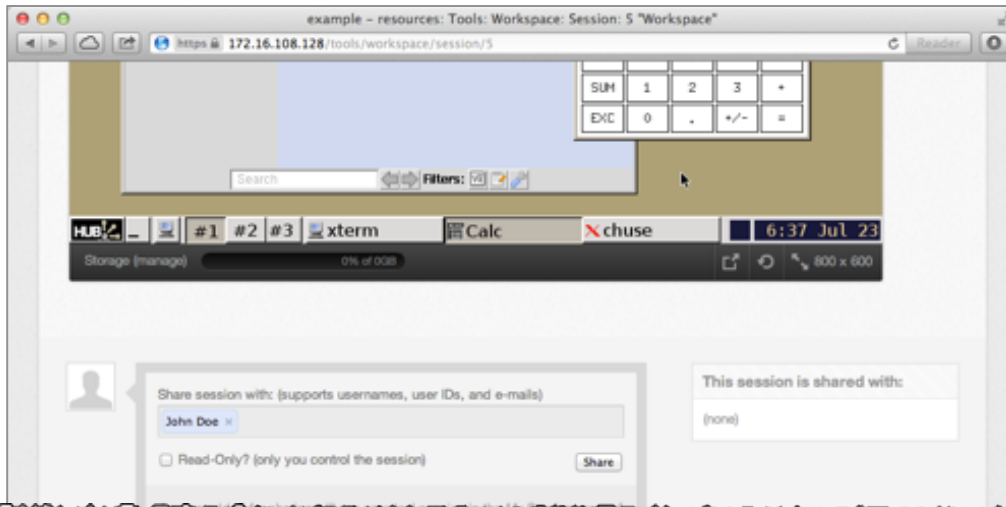


The screenshot shows a web browser window titled "example - resources: Tools: Workspace: Session: 5 'Workspace'". The browser address bar shows "https://172.16.108.128/tools/workspace/session/5". The page content includes a navigation bar with "Skip to content", "Contact", "Search", and "Help!". Below the navigation bar is a header with the "example" logo and links for "Discover", "Community", "About", and "Support". A breadcrumb trail reads "You are here: Home / Tool Forge / Tools / Workspace / Session: 5 'Workspace'". The main content area is titled "Workspace" and contains a large orange box with the text: "This area goes blank. Closing window also closes pop-up." To the right of the workspace area, a terminal window titled "Color xterm" is displayed, showing a shell prompt "ec1ennar@localhost:~\$". The terminal window is part of a larger "hub" window. At the bottom of the "hub" window, there is a taskbar with tabs labeled "#1", "#2", "#3", and "xterm". A mouse cursor is pointing at a button in the bottom right corner of the "hub" window, which has a square icon with an arrow pointing outwards. A text label next to the button says "Click button again to pop back in".

This area goes blank. Closing window also closes pop-up.

Click button again to pop back in

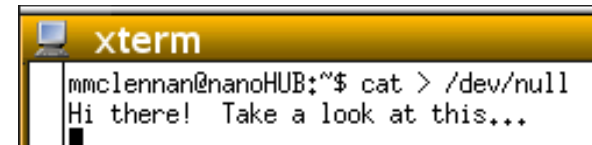
Share your screen



johndoe



Check this box if you don't want to share control



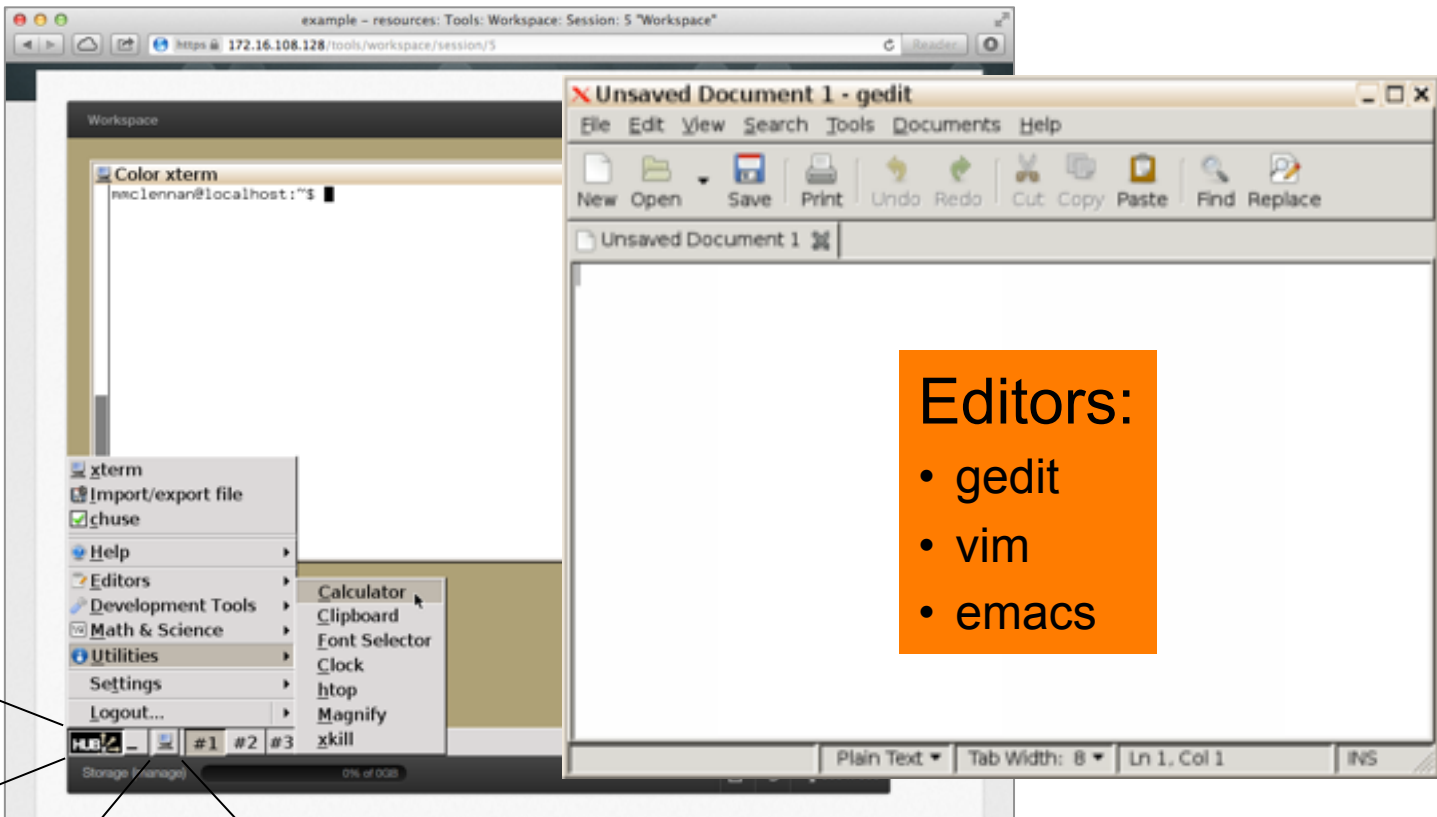
Linux Cheat Sheet



<code>ls <i>pattern</i></code>	list files in the current directory
<code>ls</code>	list all files
<code>ls *.xml</code>	list files ending with <code>.xml</code>
<code>mkdir <i>name</i></code>	make a new directory called <i>name</i>
<code>mkdir assmt3</code>	make a new directory called <code>assmt3</code>
<code>cd <i>name</i></code>	change working directory
<code>cd assmt3</code>	change to directory <code>assmt3</code>
<code>cd ..</code>	change to parent directory
<code>cd</code>	change back to home directory (good if you get lost)
<code>cp <i>from to</i></code>	copy file <i>from</i> to file <i>to</i>
<code>cp /apps/rappture/current/examples/zoo/number/tool.xml .</code>	
<code>cp ../assmt3/tool.xml newtool.xml</code>	
<code>gedit <i>file</i></code>	edit the specified file
<code>rappture</code>	run Rappture (loads <code>tool.xml</code> by default)
<code>rappture -tool foo.xml</code>	

<code>/</code>	= separates directories
<code>.</code>	= current directory
<code>..</code>	= parent directory
<code>*</code>	= matches anything
<code>?</code>	= matches single char

Explore the desktop



The screenshot shows a web-based desktop environment. At the top, a browser window displays the URL `https://172.16.108.128/tools/workspace/session/5`. Below the browser, a workspace area contains a terminal window titled "Color xterm" with the prompt `mac@lennar@localhost:~$`. A "Start" menu is open, showing various application categories like "Editors", "Development Tools", and "Utilities". A "New terminal window" icon is shown below the workspace. An orange box on the right lists editors: gedit, vim, and emacs. The gedit window is titled "Unsaved Document 1 - gedit" and shows a blank document.

“Start” menu

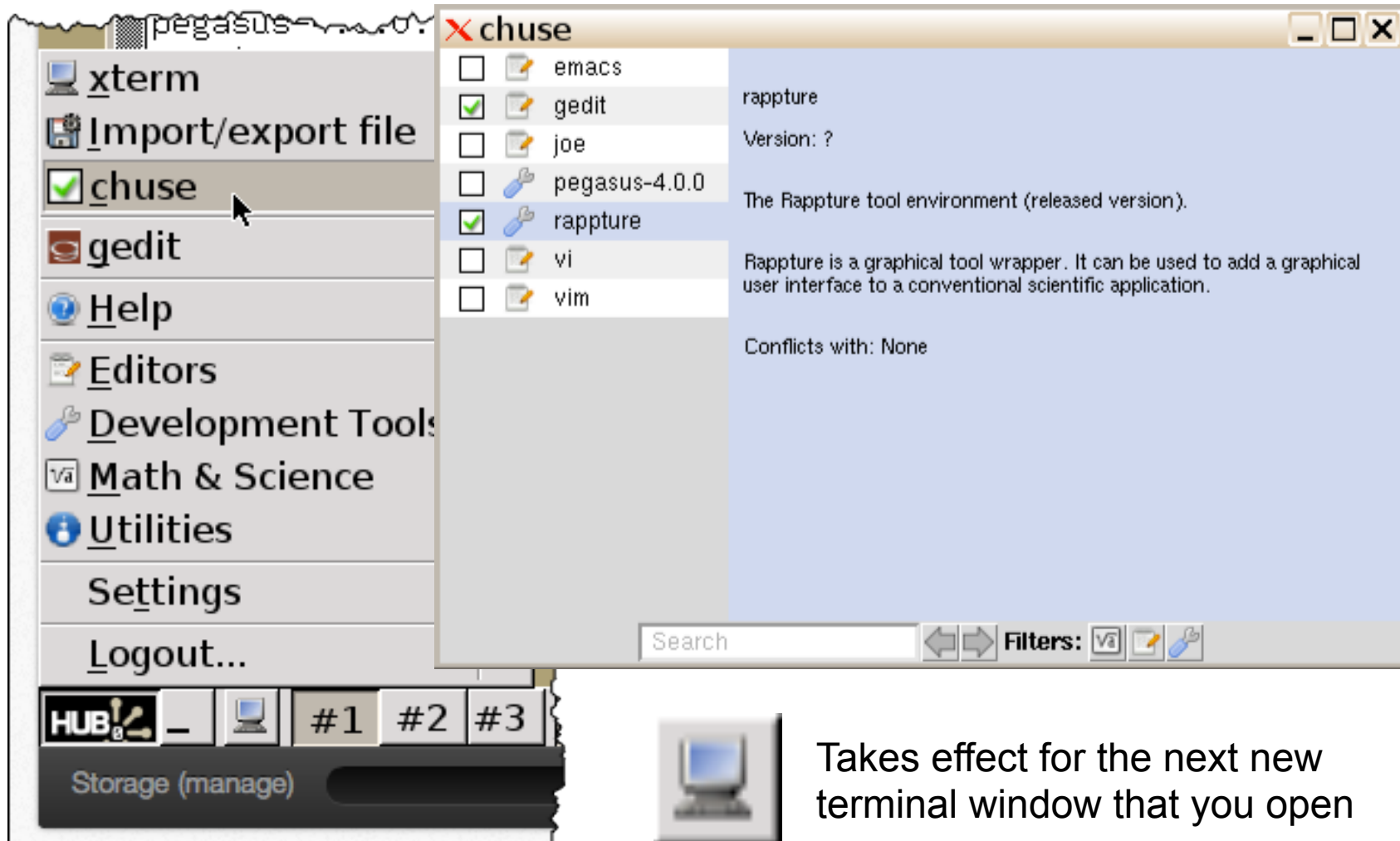
HUB! logo

New terminal window

Editors:

- gedit
- vim
- emacs

Choosing common utilities



The screenshot shows the Ubuntu desktop environment. On the left, the application menu is open, displaying various categories and applications. The 'chuse' application is highlighted. On the right, the 'chuse' window is open, showing a list of utilities with checkboxes. The 'rappture' utility is selected. The window also displays a description of the Rappture tool environment and its purpose.

Utility	Selected
emacs	<input type="checkbox"/>
gedit	<input checked="" type="checkbox"/>
joe	<input type="checkbox"/>
pegasus-4.0.0	<input type="checkbox"/>
rappture	<input checked="" type="checkbox"/>
vi	<input type="checkbox"/>
vim	<input type="checkbox"/>

rappture
Version: ?
The Rappture tool environment (released version).
Rappture is a graphical tool wrapper. It can be used to add a graphical user interface to a conventional scientific application.
Conflicts with: None



Takes effect for the next new terminal window that you open

Downloading files



The image shows a workspace interface with two windows. The left window is a terminal titled 'xterm' with the following commands and output:

```
maciennan@localhost:~$ ls
bootcamp2013 data tool.xml
maciennan@localhost:~$ exportfile tool.xml
maciennan@localhost:~$
```

The right window is a file viewer titled 'example' showing the XML content of 'tool.xml':

```
<?xml version="1.0"?>
<run>
  <tool>
    <title>Rappture Tutorial - Assignment #1</title>
    <about>This simple tool sums two integers and produces an integer
value.</about>
    <command>python #tool/main.py #driver</command>
  </tool>
  <input>
    <integer id="v1">
      <about>
        <label>Add this</label>
        <description>First value (v1) in the "v1 + v2"
putation performed by this tool.</description>
      </about>
      <default>0</default>
    </integer>
    <integer id="v2">
      <about>
        <label>To this</label>
        <description>Second value (v2) in the "v1 + v2"
putation performed by this tool.</description>
      </about>
      <default>0</default>
    </integer>
  </input>
  <output>
    <integer id="sum">
      <about>
        <label>Sum</label>
        <description>Sum of the two input values.</description>
```

Easy way to download:
exportfile tool.xml

Uploading files



```
example - resources: Tools: Workspace: Session: 7 "Workspace"
https://172.16.108.128/tools/workspace/session/7
Workspace
xterm
maciennan@localhost:~$ ls
bootcamp2013 data tool.xml
maciennan@localhost:~$ exportfile tool.xml
maciennan@localhost:~$ importfile
```

Easy way to upload:
importfile

IMG_1876.jpg