

RESEARCH TOOLS 2011

LECTURE 02

2011-Sep-01

Kurt Schwehr

<http://schwehr.org>

UNH CCOM/JHC

IRC, Wiki, Basic Shell



```
#+STARTUP: showall

#+TITLE: Class 2: IRC, Wiki Basics, Shell Basics (DRAFT)
#+AUTHOR: Kurt Schwehr
#+EMAIL: schwehr@ccom.unh.edu
#+DATE: <2011-08-30 Tue>
#+DESCRIPTION: Marine Research Data Manipulation and Practices
#+KEYWORDS:
#+LANGUAGE: en
#+OPTIONS: H:3 num:nil toc:t \n:nil @:t ::t |:t ^:t -:t f:t *:t <:t
#+OPTIONS: TeX:t LaTeX:nil skip:t d:nil todo:t pri:nil tags:not-in-toc
#+INFOJS_OPT: view:nil toc:nil ltoc:t mouse:underline buttons:0 path:http://orgmode.org/org-info.js
#+EXPORT_SELECT_TAGS: export
#+EXPORT_EXCLUDE_TAGS: noexport
#+LINK_HOME: http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/

* Introduction...
* Internet Relay Chat (IRC)...
** See Also...
** ChatZilla in Firefox...
** Why did I pick IRC over some other group chat?...
** Introduce yourself!...
** Too much text for IRC? Use a "paster"...
* CCOM Wiki...
** A look around...
** TODO Homework DUE Tuesday Sept 6th <2011-09-06 Tue>...
```

Chrome File Edit View History Bookmarks Window Users Help

Index of /~schwehr/Classes/ x

vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/

2	2011-09-01	IRC, Wiki, Basic Shell	mp3		comment
1	2011-08-30	Introduction	mp3		comment

The blog column points to posts on blogger where people can leave comments and have discussions. <http://schwehr.org/blog>, my normal blog channel is not setup for comments, so I will be using my blogger account for feedback.

Short links

- <http://vislab-ccom.unh.edu/~schwehr/rt/> is an alias to [ResearchTools 2011](#)
- <http://tinyurl.com/researchtools2011>

More Course Materials

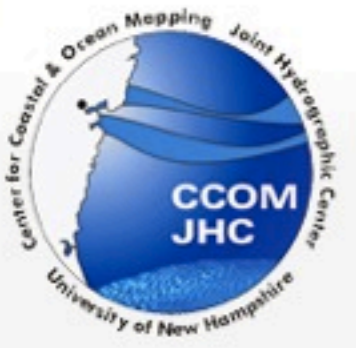
- Google Group for discussions: <http://groups.google.com/group/researchtools2011>
- [Ubuntu Virtual Machines](#) for VMWare

Virtual Machine account:

- user: researchtools
- pass: !rt2011vm

Final

There will be NO final. The real test will be how well you are able to use and adapt the material from this class for your own research and future classes.



- Navigation
- Main page
 - Community portal
 - Current events
 - Recent changes
 - Random page
 - Help

- Toolbox
- What links here
 - Related changes
 - Special pages
 - Printable version
 - Permanent link

Page [Discussion](#) Read [View source](#) [View history](#)

Main Page

Welcome to the CCOM Wiki

- [In-Brief](#)
- [Facilities](#)
- [Research](#)
- [Computers](#)
- [Field Equipment](#)
- [Wiki Admin](#)
- [Calendars](#)
- [Administration](#)
- [Jobs/Interns](#)

Making a Start with the Wiki

If you haven't used a Wiki before, and need some guidelines on what to add, or how to add it, there's advice available in the [Wiki Guide](#).

IT Service Announcements

The [network](#) at CCOM is, like all networks, a work in progress. When things change, they will be announced here (hopefully some time in advance, but possibly in arrears). Please check here for new information before contacting the [IT Group](#) if something appears broken.

Current Announcements

- There are no announcements at this time.

Ongoing Concerns

- There are no ongoing concerns at this time. To report a technical problem, please contact the [CCOM IT Helpdesk](#) ☎

In-Brief Information

There are a bunch of [things you need to know](#) about working at CCOM, and more to know if you're part of one or more sub-groups of the population, such as:

- [Faculty](#)
- [Staff](#)
- [Graduate Students](#)
- [NOAA Graduate Students](#)
- [GEBCO Students](#)

There's also an [IT In-Brief](#) that you should read, and an [Acceptable Use Policy](#) to which you need to adhere. Also see CCOM's [Safety Information](#) section.

[\(Start Here\)](#)

Administration Announcements

Current Announcements

* Internet Relay Chat (IRC)

We will now join a open group chat. Please remember that IRC is not a secure service. Anything you type can be logged or seen by clever people not in the chat room. ***Be careful what you type into IRC!***

** See Also:

- <http://www.youtube.com/watch?v=yzkJZLgt03w>
What is IRC? (Internet Relay Chat) How do I connect to it? by thisweeklinux

** ChatZilla in Firefox

- Start Firefox
- Search for ChatZilla or go directly to <https://addons.mozilla.org/en-US/firefox/addon/chatzilla/>
- Click "Add to Firefox"
- Wait while it downloads
- Click "Install Now" once the Install add-ons popup is ready.
- Restart Firefox

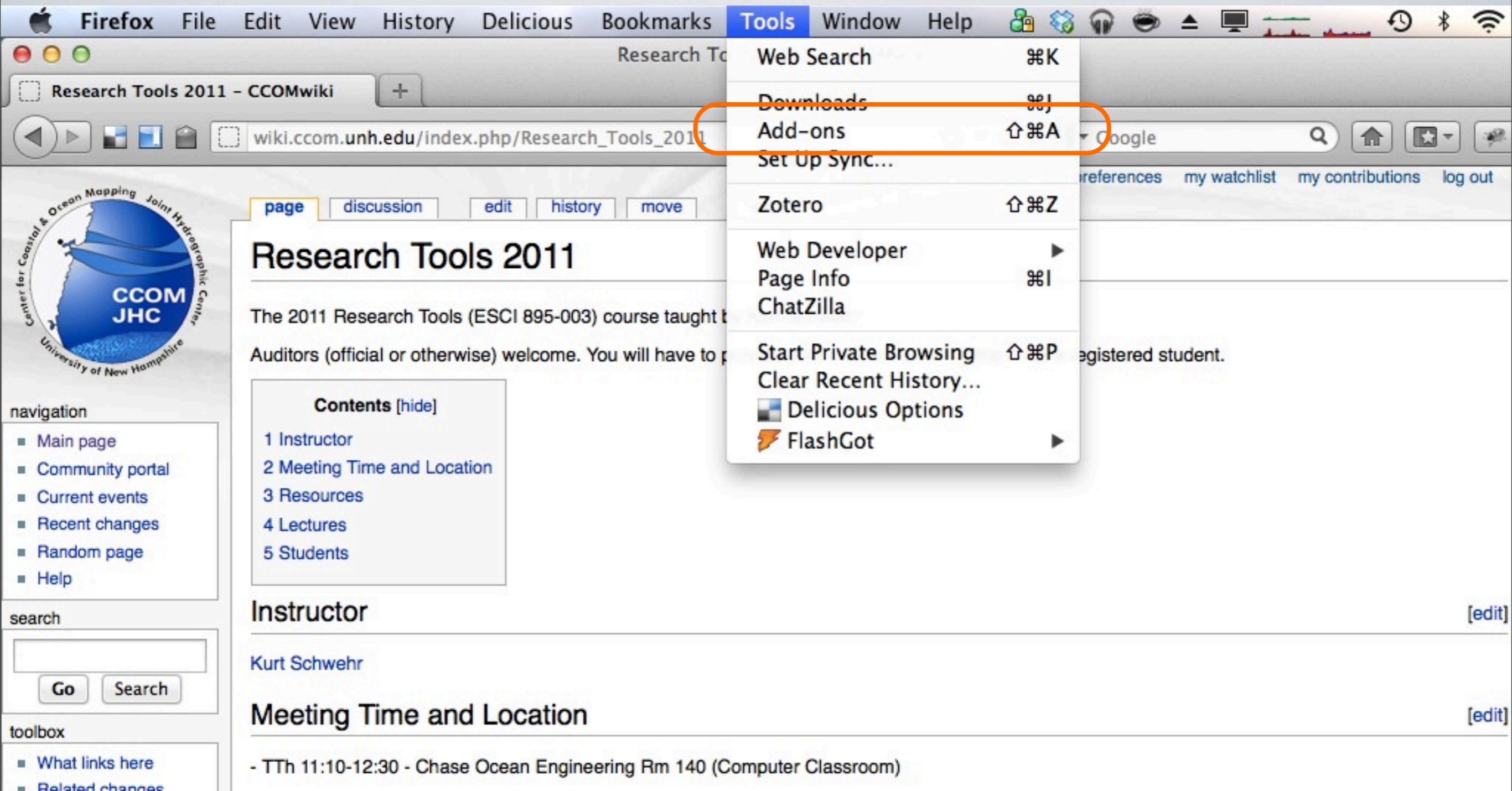
Firefox 6 on Windows 7 comes up in a different mode than it has in the past. Plugins are not directly available. Click the "Firefox" label on the top left of the Firefox window. Under "Options", turn on the "Menu Bar". You should now see a menu across the top that contains:

"File Edit View History Bookmarks Tools Help"

Under "Tools," select "ChatZilla" at the bottom.

ChatZilla will use your login name (often referred to as you "shortname") by default. You can pick anything you like, but if you don't use something related to your name, people may have trouble which user in a chat is you. For this class, make sure to use the same short name as your CCOM account - please do not change your alias.

We need to now sign into an "IRC Server" that hosts chat rooms. There are many thousands of servers in the world and we will even setup on at CCOM later in the semester. For now, I have created an unofficial channel on <http://freenode.net>. FreeNode supports free and opensource software and this class is primarily about just those topics. Type this command right into the bottom window of ChatZilla:



This is on the Mac, but Firefox looks similar on Linux

Register or Log in Other Applications mozilla

ADD-ONS

EXTENSIONS | PERSONAS | THEMES | COLLECTIONS | MORE...

Extensions » ChatZilla



ChatZilla 0.9.88.2

by Gijs Kruitbosch, Robert Ginda, Samuel Sieb, James Ross

A clean, easy to use and highly extensible Internet Relay Chat (IRC) client.

+ Add to Firefox

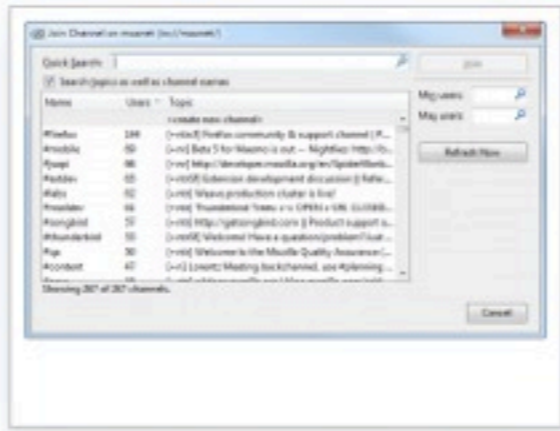
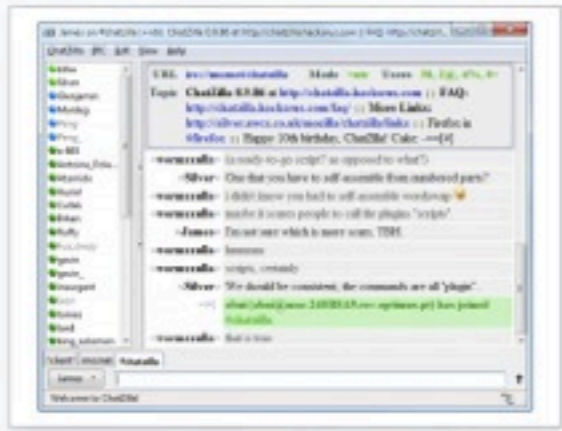
Privacy Policy



107 user reviews

244,507 users

- Add to collection
- Share this Add-on





Install add-ons only from authors whom you trust.

Malicious software can damage your computer or violate your privacy.

You have asked to install the following item:

 **ChatZilla** (Author not verified)
<https://addons.mozilla.org/firefox/downloads/latest/16/addon-16-lates>

Cancel Install Now

ADD-ONS

EXTENSIONS | PERSONAS | THEMES

Extensions » ChatZilla



ChatZilla 0.9

by Gijs Kruitbosch, R...

A clean, easy to use

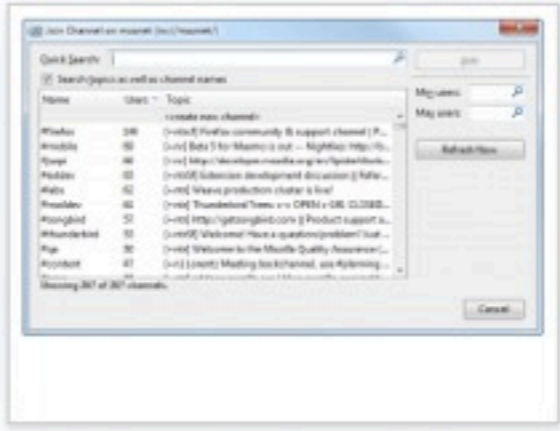
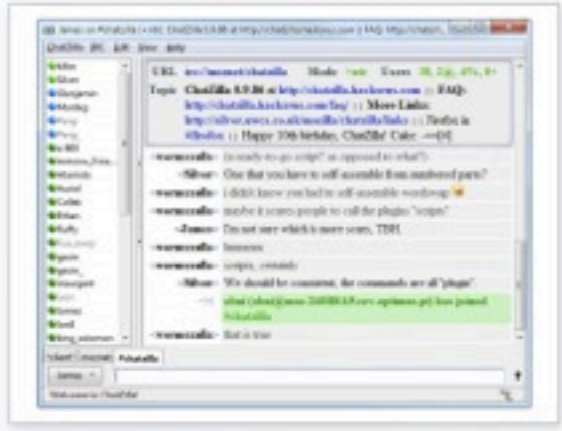
+ Add to Firefox

[Privacy Policy](#)



107 user reviews
244,507 users

- Add to collection
- Share this Add-on



ChatZilla will be installed after you restart Firefox.

Restart Now

Register or Log in Other Applications mozilla

search for add-ons

Extensions » ChatZilla



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by Gijs Kruitbosch, Robert Ginda, Samuel Sieb, James Ross

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+ Add to Firefox

Privacy Policy

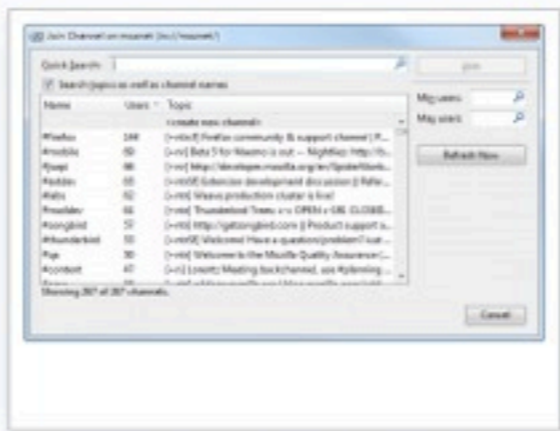
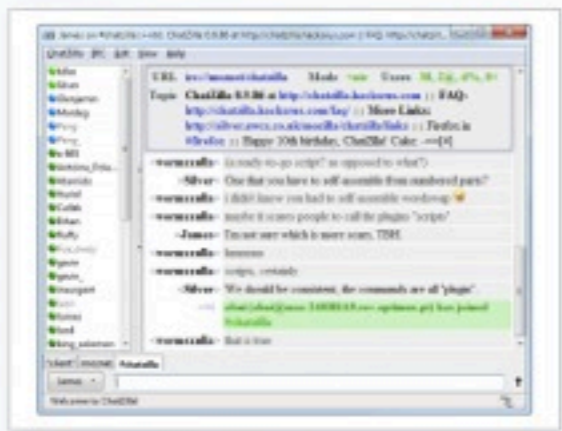


107 user reviews

244,507 users

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Share this Add-on



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Firefox File Edit View History Delicious Bookmarks Tools Window Help

Research Tools 2011 - CCOMwiki

wiki.ccom.unh.edu/index.php/Research_Tools_2011



page discussion edit history move

Research Tools 2011

The 2011 Research Tools (ESCI 895-003) course taught by...

Auditors (official or otherwise) welcome. You will have to p...

navigation

- Main page
- Community portal
- Current events
- Recent changes

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ChatZilla

Start Private Browsing ⌘P

Clear Recent History...

Delicious Options

FlashGot

Firefox ChatZilla IRC Edit View Help

Research Tools 2011 - CCOMwiki

ChatZilla!

Known Networks 12 **ChatZilla 0.9.88.2** Connected Networks 0

[HELLO] **Welcome to ChatZilla...**
Below is a short selection of information to help you get started using ChatZilla.

[HELLO] **Help is available from many places:**

- `/commands` lists all the built-in commands in ChatZilla. Use `/help <command-name>` to get help on individual commands.
- The IRC Help website <http://www.irchelp.org> provides introductory material for new IRC users.
- The ChatZilla website <http://chatzilla.hacksrus.com> provides more information about IRC and ChatZilla, including the ChatZilla FAQ <http://chatzilla.hacksrus.com/faq>, which answers many common questions about using ChatZilla.

[INFO] Available networks are [dalnet, efnet, freenode, hispano, ircnet, mozneta, quakenet, serenia, slashnet, solidirc, undernet, webbneta].

client

schwehr_

- Change nickname...
- ✓ Back
- Away (I'm not here right now.)
- Away (custom)...

Students



Connect to freenode IRC

Nickname:

Channels:

Auth to services:

[reCAPTCHA:](#)



Reload

Audio captcha:

Connect

Known Networks 12

ChatZilla 0.9.88.2

Connected Networks 0

[HELLO] **Welcome to ChatZilla...**
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[INFO] Available networks are [**dalnet, efnet, freenode, hispano, ircnet, mozneta, quakenet, serenia, slashnet, solidirc, undernet, webbneta**].

client

schwehr_ ▾



Welcome to ChatZilla!



Firefox ChatZilla IRC Edit View Help

freenode.net:6667

Connected Lag 5.63 seconds

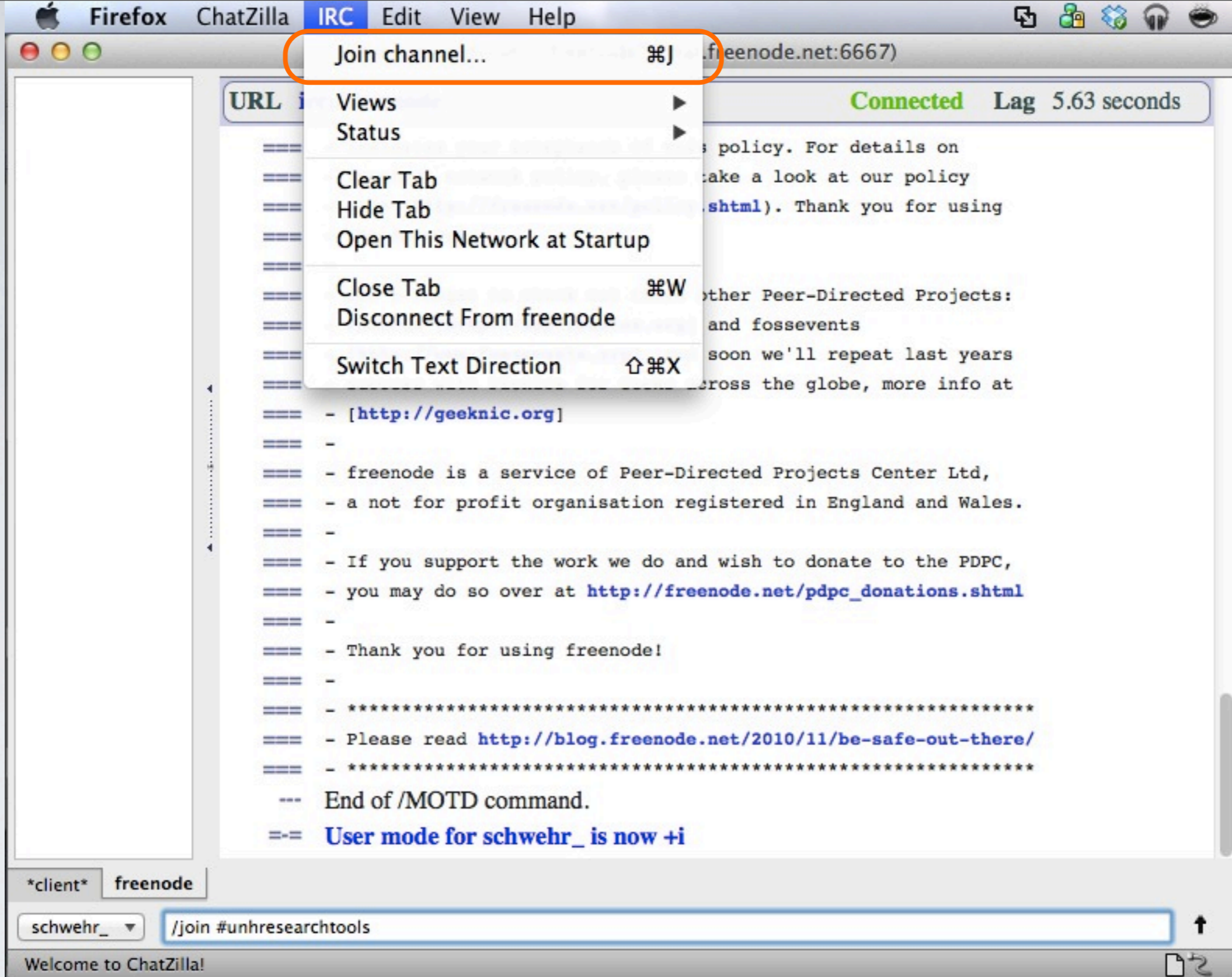
Views
Status
Clear Tab
Hide Tab
Open This Network at Startup
Close Tab ⌘W
Disconnect From freenode
Switch Text Direction ⌘X

URL
- [<http://geeknic.org>]
-
- freenode is a service of Peer-Directed Projects Center Ltd,
- a not for profit organisation registered in England and Wales.
-
- If you support the work we do and wish to donate to the PDPC,
- you may do so over at http://freenode.net/pdpc_donations.shtml
-
- Thank you for using freenode!
-
- *****
- Please read <http://blog.freenode.net/2010/11/be-safe-out-there/>
- *****
--- End of /MOTD command.
== User mode for **schwehr_** is now +i

client freenode

schwehr_ /join #unhresearchtools

Welcome to ChatZilla!



Firefox

User schwehr_ on ``freenode" (chat.freenode.net:6667)

URL <irc://freenode/> **Connected** Lag 5.63 seconds

=== - indicates your acceptance of this policy. For details on
=== - freenode network policy, please take a look at our policy
=== - page (<http://freenode.net/policy.shtml>). Thank you for using

Join Channel on freenode (irc://freenode/)

Quick Search:

Search topics as well as channel names

Name	Users	Topic
#unhresearchtools		<create new channel>

Min users:

Max users:

Showing 0 of 10831 channels.

== User mode for schwehr is now +i

- goatbar
- schwehr_

URL <irc://freenode/unhresearchtools> Mode **+ns** Users **2, 1@, 0%, 0+**
 Topic <none>

#unhresearchtools

-->| **YOU (schwehr_) have joined #unhresearchtools**

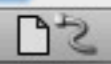
<goatbar> hi all

<goatbar> hi schwehr_

client freenode #unhresearchtools

schwehr_

Welcome to ChatZilla!



Firefox ChatZilla IRC Edit View Help

on #unhresearchtools (+ns): No Topic

Mode +ns Users 2, 1@, 0%, 0+

goatbar
schwehr_

Preferences...
Install Plugin...
Open Auto-connect
Print... ⌘P
Save View As... ⌘S

#unhresearchtools

-->| YOU (schwehr_) have joined #unhresearchtools

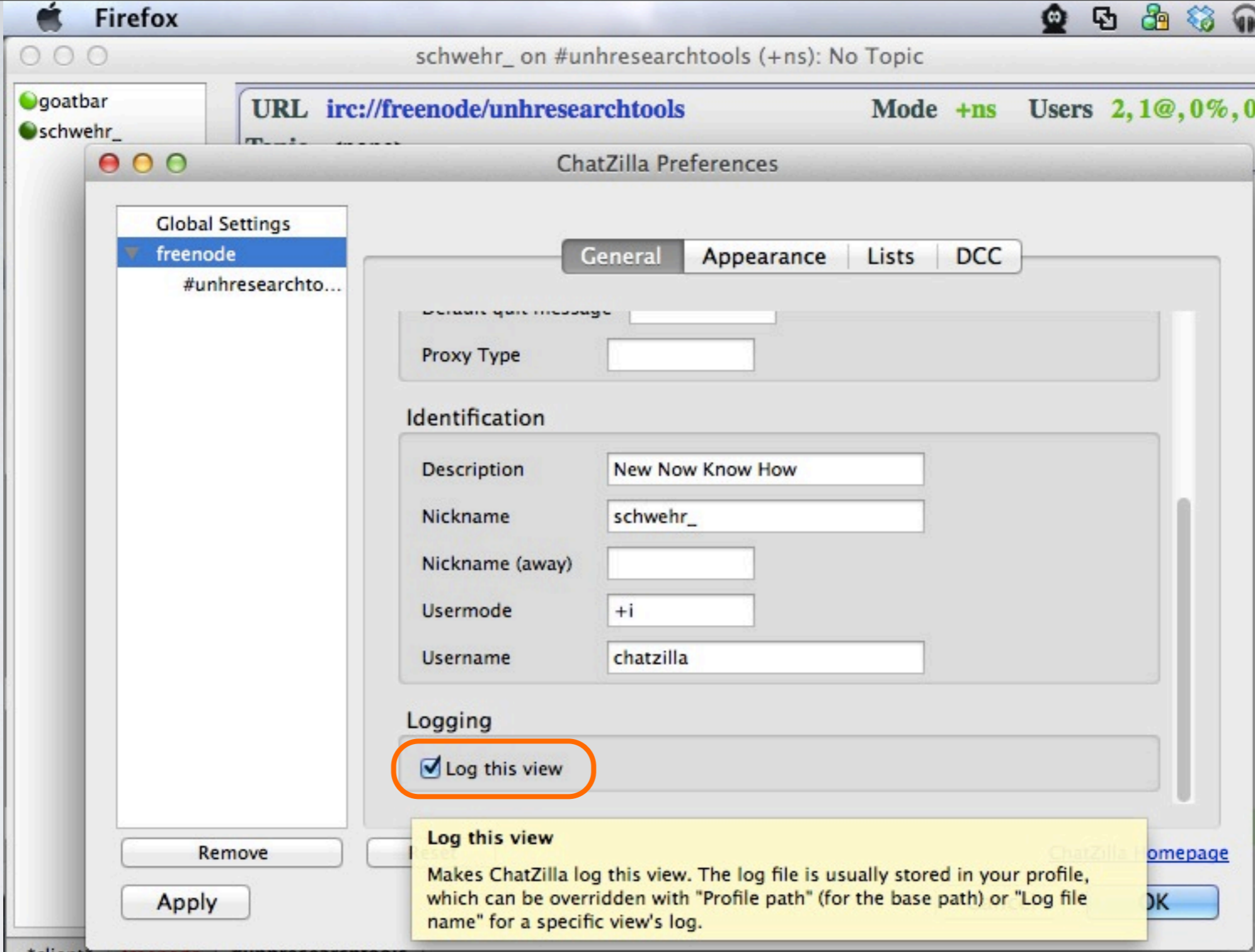
<goatbar> hi all

<goatbar> hi schwehr_

client freenode #unhresearchtools

schwehr_ |

Welcome to ChatZilla!



Firefox ChatZilla IRC Edit View Help

schwehr_ on #unhresearchtools (+ns): No Topic

goatbar
schwehr_

URL <irc://freenode/unhresearchtools> Mode **+ns** Users **2, 1@, 0%, 0+**
Topic <none>

#unhresearchtools

-->| **YOU (schwehr_) have joined #unhresearchtools**

<goatbar> hi all
<goatbar> hi schwehr_
<goatbar> http://wiki.com.unh.edu/index.php/Research_Tools_2011

client freenode #unhresearchtools

schwehr_

[2012-06-23 10:37:55] schwehr_!~chatzilla@c-67-180-84-17.hsd1.ca.comcast.net

page discussion edit history move watch

Research Tools 2011

The 2011 Research Tools (ESCI 895-003) course taught by Kurt Schwehr

Auditors (official or otherwise) welcome. You will have to provide your own computer/laptop if not a registered student.

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Instructor

[edit]

Kurt Schwehr

Meeting Time and Location

[edit]

- TTh 11:10-12:30 - Chase Ocean Engineering Rm 140 (Computer Classroom)

Resources

[edit]

- [Class Web Page](#) [Under construction!!!](#) - [Researchtools.com.nh](#) - Ubuntu Linux server (actually a virtual machine) for use during class projects

Lectures

[edit]

- 1 Introduction - topics that will be covered
- **Lec 2 Research Tools 2011** - Getting started - IRC via Firefox Chatzilla, the CCOM wiki, logging in to researchtools.com.nh
- Lecture 3 - 6-Sept-2011
- Lecture 4 - 8-Sept-2011 - VMWare, Short lecture for brown bag seminar

Students

[edit]



- navigation
- Main page
 - Community portal
 - Current events
 - Recent changes
 - Random page
 - Help

search

Go Search

- toolbox
- What links here
 - Related changes
 - Upload file
 - Special pages
 - Printable version
 - Permanent link

Colloquy File Edit View Font Window Help

ubuntu (irc.freenode.net)

Style Emoticons Encoding Aあ

Mark Clear Search Messages Search

Official Ubuntu Support Channel | IRC Guidelines: <http://ubottu.com/y/q> | IRC info:


—ChanServ: [#ubuntu] Welcome to #ubuntu! Please read the channel topic. This channel is logged. Use of this channel implies acceptance of terms at <https://wiki.ubuntu.com/IRC/TermsOfService> 10:47am

Meistarín: A config file for a program 10:47am

Darael: Meistarín: It's in /var/www, presumably? 10:48am

ivan__ joined the chat room. 10:48am

switch10_ left the chat room. (Ping timeout: 264 seconds) 10:48am



fink
erma
gpsd
unhresearchtools
gdal
python
matplotlib
django
ubuntu
FloodBot1
FloodBot2
FloodBot3
16SABG3JB
[Derek]
[deXter]
[Relic]
__william
_B00
GoRDoN
_iron
k2s
_marix
_NiC

Settings Heart

The World's First Web Published Book (2000)

[Internet](#) > [Internet Relay Chat \(IRC\)](#) > [How To Use](#) >

IRC Chatiquette -- Chat Etiquette

*Note that you will often come in in the *middle* of a conversation. Unless you're familiar with the channel you may want to sit and watch it for a minute or two to see what the conversation is about.*

- [irc-faq](#); Version 1.53; November 28, 1995.

All sorts of people and opinions are expressed on IRC, since it is a real-time common space on the global [Internet](#) on which people can exercise their right to [free speech](#). Just as in any public space, such as a park or restaurant, a little attention to chatiquette (chat etiquette) will make the experience more pleasant for everyone on IRC.

Each channel has at least one or more [operators](#), often called just "ops", who control the channel. Occasionally, operators will [kick](#) you off the channel if you offend them. Particularly offensive behavior can get you banned from the entire network, although that is rare. Some operators just enjoy kicking people off their channel, so don't take it personally if it happens to you. If you get kicked off a channel and want back on, you can use the [/msg](#) command to ask the operator politely to be allowed back in.

The following chatiquette guidelines are useful to keep in mind:

- [Consideration](#). Watch a channel for several minutes to observe the mood before sending a message after you join to make sure you have some understanding of the community atmosphere that has built up in the room before you arrived.
- [Don't shout](#). Avoid capital letters, which are interpreted as shouting.

** Introduce yourself!

Please introduce yourself on the channel and then say a real hello to the class.

** Too much text for IRC? Use a "paster"

There are many services on the web that let you paste text and share the URL (web address). One I frequently use is <http://pastebin.com>. You should also consider anything pasted on pastebin as public. Do not paste anything that you would not otherwise tell to anyone. Even if you are not logged in, the IP address (the address of your computer or network router) is logged. You can be found. Don't post anything outside of the CCOM acceptable use policy!!!

* CCOM Wiki

** A look around

- What kind of material is available on the wiki?
- What are some of the special pages?
- Create an account for yourself. Please ***DO NOT*** edit without being logged in.

** TODO Homework DUE Tuesday Sept 6th [<2011-09-06 Tue>](#)

- Create a CCOM user wiki page for yourself. For example:
 - <http://wiki.ccom.nh/index.php/User:Schwehr>
 - <http://wiki.ccom.nh/index.php/User:Ben>
- Link that page into the student section of the research tools page.

PASTEBIN | #1 paste tool since 2002 create new paste | tools | api | archive | real-time | faq

PASTEBIN [Follow @pastebin](#)

[create new paste](#) [trending pastes](#) Hi, goatbar | my pastebin | my alerts | my settings | my profile | logout | Go PRO

I hid the ad

New Paste

```
#####

zda_nmea_regex_str = r'''[$!](?P<talker>[A-Z][A-Z])(?P<sentence>ZDA),
(?P<time_utc>(P<hours>\d\d)(?P<minutes>\d\d)(?P<seconds>\d\d\.\d\d*))?,
(?P<day>\d\d)?,
(?P<month>\d\d)?,
(?P<year>\d{4})?,
(?P<zone_hrs>[+-]?(\d\d))?,
(?P<zone_min>(\d\d))?,?
\*(?P<checksum>[0-9A-F][0-9A-F])'''

...

$--ZDA,hhmmss.ss,xx,xx,xxxx,xx,xx*hh<CR><LF>
| | | | |
| | | | | +--Local zone minutes description, same sign as local hours
| | | | +-----Local zone description [1], 00 to +-13 hrs
| | | +-----Year
| | +-----Month, 01 to 12
| +-----Day , 01 to 31
+-----UTC'''

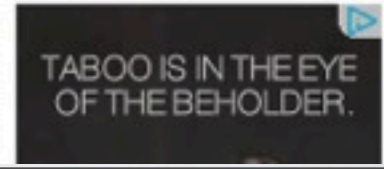
regex_dict['zda'] = re.compile(zda_nmea_regex_str, re.VERBOSE)
|
```

My Pastes

- [start to a colored...](#)
Python | 50 days ago
- [Xah's parsing chal...](#)
Python | 60 days ago
- [Untitled](#)
Python | 63 days ago
- [Untitled](#)
Python | 64 days ago
- [Untitled](#)
Python | 64 days ago
- [nais2pg cursor issue](#)
74 days ago
- [gall nais2pg crash](#)
74 days ago
- [no mac virus](#)
77 days ago

Public Pastes

- [Untitled](#)
0 sec ago
- [Untitled](#)
1 sec ago
- [Untitled](#)
5 sec ago
- [https://twitter.co...](#)
24 sec ago
- [Untitled](#)
JavaScript | 5 sec ago
- [Mediafire premium ...](#)
14 sec ago
- [Untitled](#)
6 sec ago
- [Untitled](#)
8 sec ago



Optional Paste Se

Syntax Highlighting:

Paste Expiration:

Paste Exposure:

Paste Name / Title:

- POV-Ray
- Power Shell
- PowerBuilder
- ProFTPD
- Progress
- Prolog
- Properties
- ProvideX
- PureBasic
- PyCon
- Python**
- q/kdb+
- QBasic
- R
- Rails
- REBOL
- REG
- Robots
- RPM Spec
- Ruby
- Ruby Gnuplot
- SAS
- Scala
- Scheme
- Scilab
- SdlBasic
- Smalltalk
- Smarty
- SQL
- SystemVerilog
- T-SQL
- TCL
- Tera Term
- thinBasic
- TypoScript
- Unicon
- UnrealScript
- Vala
- VB.NET
- VeriLog
- VHDL
- VIM
- Visual Pro Log



Hello goatbar

My Pastebin

or

Edit Settings

Pastebin.com Tools & A

```
regex_dict['zda'] = re.compile(zda_nmea_regex_str, re.VERBOSE)
```

Optional Paste Settings

Syntax Highlighting: Python

Paste Expiration: Never

Paste Exposure: Public

Paste Name / Title: sample python paste

Submit Paste as a guest

 Hello goatbar

[My Pastebin](#) or [Edit Settings](#)

Pastebin.com Tools & Applications

-  iPhone/iPad
-  Windows
-  Firefox
-  Chrome
-  WebOS
-  Android
-  Mac
-  Opera
-  Click.to
-  UNIX
-  WinPhone



PASTEBIN

Follow @pastebin

search...

create new paste trending pastes

Hi, goatbar | my pastebin | my alerts | my settings | my profile | logout | Go PRO



sample python paste

BY: GOATBAR ON JUN 23RD, 2012 | SYNTAX: PYTHON | SIZE: 0.71 KB | HITS: 0 | EXPIRES: NEVER

EDIT | DELETE | DOWNLOAD | RAW | EMBED | REPORT ABUSE

f 0

t 0

My Pastes

- sample python paste Python | 5 sec ago
- start to a colored... Python | 50 days ago
- Xah's parsing chal... Python | 60 days ago
- Untitled Python | 63 days ago
- Untitled Python | 64 days ago
- Untitled Python | 64 days ago
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- gall nais2pg crash 74 days ago

Public Pastes

- sample python paste Python | 5 sec ago
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- Untitled 1 sec ago
- Untitled 1 sec ago
- New folder 7z 1 sec ago
- #OpStopG4S 14 sec ago
- Untitled 16 sec ago



```

1.
2. #####
3.
4. zda_nmea_regex_str = r'''[$!](?P<talker>[A-Z][A-Z])(?P<sentence>ZDA),
5. (?P<time_utc>(?(P<hours>\d\d)(?P<minutes>\d\d)(?P<seconds>\d\d.\d\d*)),
6. (?P<day>\d\d)?,
7. (?P<month>\d\d)?,
8. (?P<year>\d{4})?,
9. (?P<zone_hrs>[+-]?(\d\d))?,
10. (?P<zone_min>(\d\d))?,?
11. \*(?P<checksum>[0-9A-F][0-9A-F])'''
12.
13. '''
14. $--ZDA,hhmmss.ss,xx,xx,xxxx,xx,xx*hh<CR><LF>
15. | | | | |
16. | | | | | +---local zone minutes description, same sign as local hours
17. | | | | +-----Local zone description [1], 00 to +-13 hrs
18. | | | +-----Year
19. | | +-----Month, 01 to 12
20. | +-----Day , 01 to 31
21. +-----UTC'''
22.
23. regex_dict['zda'] = re.compile(zda_nmea_regex_str, re.VERBOSE)

```



schwehr_ on #unhresearchtools (+ns): No Topic

- goatbar
- schwehr_

URL <irc://freenode/unhresearchtools>

Mode **+ns** Users **2, 1@, 0%, 0+**

Topic <none>

#unhresearchtools

-->| **YOU (schwehr_) have joined #unhresearchtools**

<goatbar> hi all

<goatbar> hi schwehr_

<goatbar> http://wiki.ccom.unh.edu/index.php/Research_Tools_2011

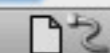
<goatbar> <http://pastebin.com/WZVUZ0V7>

client freenode #unhresearchtools

schwehr_ ▾



Welcome to ChatZilla!



IRC INTRODUCTIONS

I'm leaving out the students' introductions



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Instructor

[Kurt Schwehr](#)

Meeting Time and Location

- TTh 11:10-12:30 - Chase Ocean Engineering Rm 140 (Computer Classroom)

Resources

- [Class Web Page](#) [\[edit\]](#) **Under construction!!!** - [Researchtools.com.nh](#) - Ubuntu Linux server (actually a virtual machine) for use during class projects

Lectures

- 1 Introduction - topics that will be covered
- **Lec 2 Research Tools 2011** - Getting started - IRC via Firefox Chatzilla, the CCOM wiki, logging in to [researchtools.com.nh](#)
- Lecture 3 - 6-Sept-2011



Special page

Search input field with Go and Search buttons

Log in / create account

Log in

Don't have an account? [Create an account.](#)

You must have cookies enabled to log in to CCOMwiki.

Username:

Password:

Remember my login on this browser (for a maximum of 30 days)

[Forgotten your login details?](#)

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- Lecture 3 - 6-Sept-2011
- Lecture 4 - 8-Sept-2011 - VMWare, Short lecture for brown bag seminar

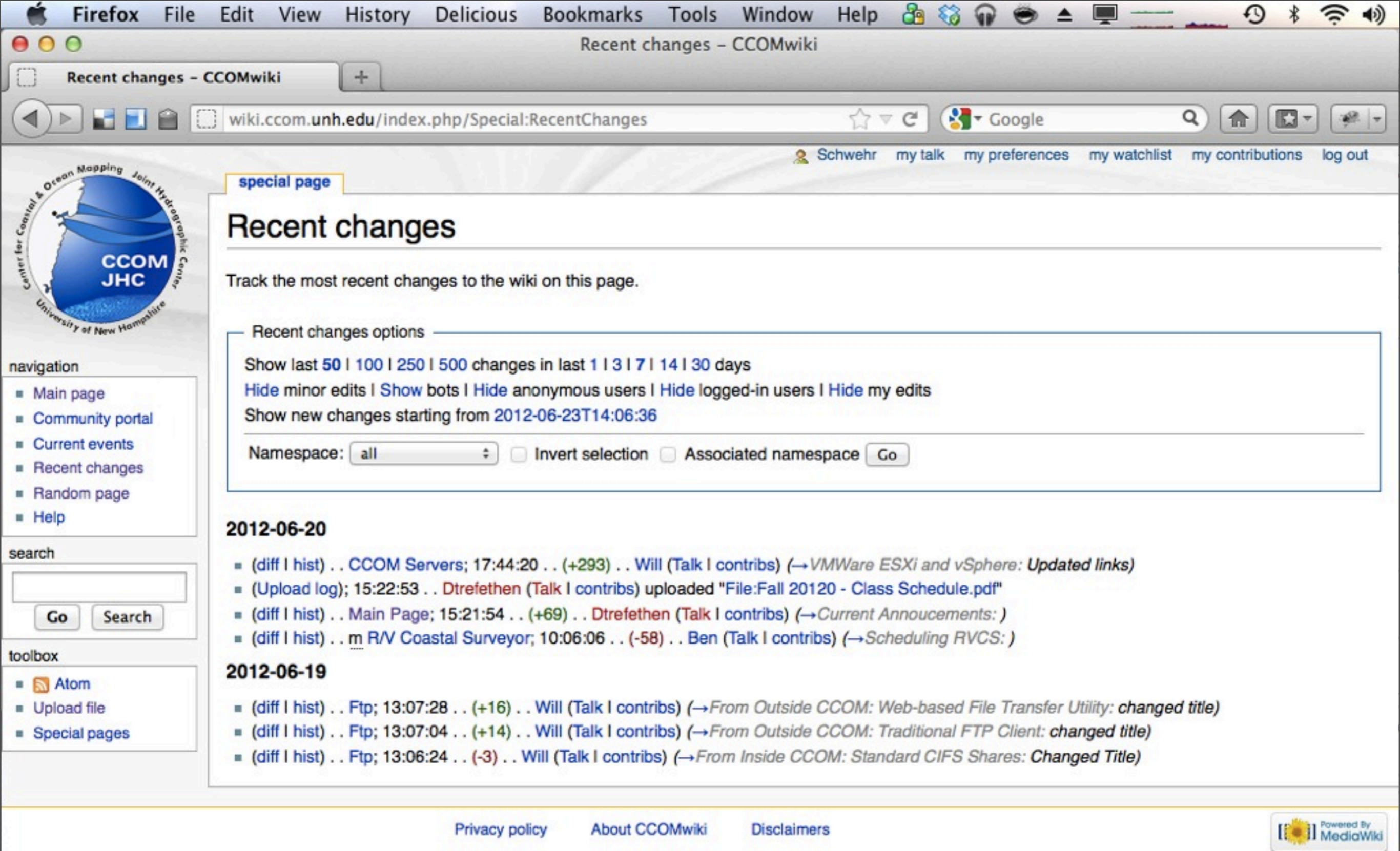


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I am now at Google full time, so I have not edited the CCOM wiki in a long time.



special page

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All pages

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Display pages ending at:

Namespace: (Main)

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[Learning Matlab and Python to TouratechQV](#)

[Trac to Zotero](#)

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- | | | |
|---|--|--|
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| AISHub | AIS Admin Notes | AIS Notices for Dynamic Management Areas |
| AIS Notices for Right Whales | AIS Notices for Right Whales admin notes | ARI Cape Cod |
| ASCII | Aanderaa | Acceptable Use Policy |
| Account Requests | AcousticTestFacility | Acoustic Test Facility |
| Acoustics | Adams Point Tide Phase Offset | Admin Announcements |
| Admin Group | Administration Resources | Adobe Acrobat |
| Adobe Dreamweaver | Adobe Illustrator | Adobe Photoshop |
| Adobe Premiere | Adobe Premiere Elements | Adobe Reader |
| Adober Illustrator | Airmar M192 | Ais.nrwbuoys.org |
| Ais rap servers | Aldebaran | Alumni |
| Anastasia Abramova | Anna Berry | Apache |
| Applanix PosMV | Applanix PosPAC | Application |
| Application program | ArcGIS | ArcGIS Server |
| Archiving | Arduino | Arduino Ethernet Web Ex 1 |
| Athur Herwindya | Audited Events | Authorship |
| AutoCAD | AutoCAD 2010 | Autodesk Inventor |
| Autodesk Mechanical Desktop | Autodesk Vault | Available Computing Resources |
| Available Source Code Libraries | Avira Antivir | Awk |

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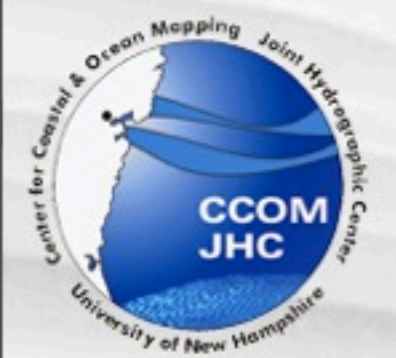
Ice Skating

Taking the [GEBCO](#) students ice skating at the Whit is a long standing tradition. Bring your own skates or rent some for \$3. All skaters must be at least 18 years old.

Schedule

[edit]

[Online Ice Skating Schedule](#) - The times are sometimes changed without updating the online schedule.



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This page has been accessed 29 times.

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Statistics

Page statistics	
Content pages	535
Pages <small>(All pages in the wiki, including talk pages, redirects, etc.)</small>	1,686
Uploaded files	669
Edit statistics	
Page edits since CCOMwiki was set up	12,425
Average edits per page	7.37
User statistics	
Registered users	99
Active users (list of members) <small>(Users who have performed an action in the last 30 days)</small>	0
Bots (list of members)	0
Administrators (list of members)	5
Bureaucrats (list of members)	1
View statistics	
Views total <small>(Views to non-existing pages and special pages are not included)</small>	68,710
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Meeting Minutes	1,059
General In-Brief	738
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Instructor

[edit]

Kurt Schwehr

Meeting Time and Location

[edit]

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- Class Web Page [\[external link\]](#) **Under construction!!!** - Researchtools.ccom.nh - Ubuntu Linux server (actually a virtual machine) for use during class projects

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Editing Research Tools 2011



'''this text is bold'''

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== Instructor ==

[[User:Schwehr|Kurt Schwehr]]

== Meeting Time and Location ==

- TTh 11:10-12:30
- Chase Ocean Engineering Rm 140 (Computer Classroom)

== Resources ==

- [http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/ Class Web Page] '''Under construction!!!'''
- [[Researchtools.ccom.nh]] - Ubuntu Linux server (actually a virtual machine) for use during class projects

== Lectures ==

- * 1 Introduction - topics that will be covered
- * [[Lec 2 Research Tools 2011]] - Getting started - IRC via Firefox Chatzilla, the CCOM wiki, logging in to

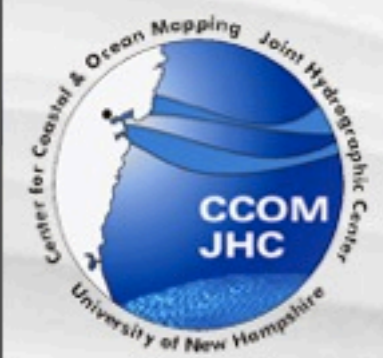
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Summary:

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Editing Research Tools 2011

Preview

Remember that this is only a preview. Your changes have not yet been saved!

this text is bold

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Editing Talk:Research Tools 2011

Preview

Remember that this is only a preview. Your changes have not yet been saved!

Let us **discussion** *Research Tools* --Kurt 15:56, 1 September 2011 (UTC)

Another comment with a signature --Kurt 14:19, 23 June 2012 (EDT)



Let us '''discussion''' 'Research' Tools --[[User:Schwehr|Kurt]] 15:56, 1 September 2011 (UTC)

Another comment with a signature -----

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Revision history of "Research Tools 2011"

[View logs for this page](#)

Browse history

From year (and earlier): From month (and earlier): Deleted only

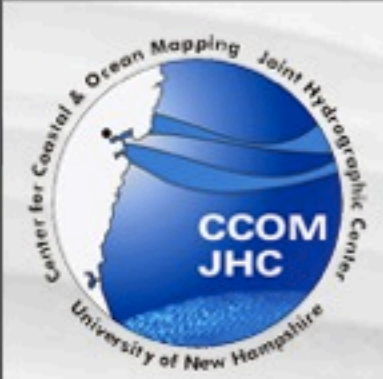
Diff selection: Mark the radio boxes of the revisions to compare and hit enter or the button at the bottom.
Legend: **(cur)** = difference with latest revision, **(prev)** = difference with preceding revision, **m** = minor edit.

- [\(cur | prev\)](#) 2011-10-21T10:34:42 [Gmitchell](#) ([Talk](#) | [contribs](#)) (1,424 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-10-04T12:49:59 [Hiroki](#) ([Talk](#) | [contribs](#)) (1,386 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-10-04T12:37:49 [Ycezairli](#) ([Talk](#) | [contribs](#)) (1,380 bytes) ([undo](#))
- [\(cur | prev\)](#) 2011-10-03T14:08:57 [Kjerram](#) ([Talk](#) | [contribs](#)) (1,344 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-08T14:24:22 [192.168.8.72](#) ([Talk](#)) (1,312 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-08T11:04:22 [Schwehr](#) ([Talk](#) | [contribs](#)) (1,278 bytes) ([→Lectures](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-07T13:25:31 [Cenglert](#) ([Talk](#) | [contribs](#)) (1,180 bytes) ([undo](#))
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- [\(cur | prev\)](#) 2011-09-06T11:10:31 [Ahyde](#) ([Talk](#) | [contribs](#)) (1,163 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-03T17:18:04 [Mchowdhury](#) ([Talk](#) | [contribs](#)) (1,132 bytes) ([undo](#))
- [\(cur | prev\)](#) 2011-09-03T17:12:22 [Mchowdhury](#) ([Talk](#) | [contribs](#)) (1,107 bytes) ([undo](#))
- [\(cur | prev\)](#) 2011-09-03T15:24:01 [Prasadh](#) ([Talk](#) | [contribs](#)) (1,090 bytes) ([undo](#))
- [\(cur | prev\)](#) 2011-09-03T15:20:04 [Prasadh](#) ([Talk](#) | [contribs](#)) (1,076 bytes) ([undo](#))
- [\(cur | prev\)](#) 2011-09-02T18:25:04 [Nhassan](#) ([Talk](#) | [contribs](#)) (1,060 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-02T18:21:54 [Nhassan](#) ([Talk](#) | [contribs](#)) (1,066 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-02T18:00:52 [Sthein](#) ([Talk](#) | [contribs](#)) (1,062 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-02T17:47:45 [ThanhNga](#) ([Talk](#) | [contribs](#)) (1,048 bytes) ([→Students](#)) ([undo](#))
- [\(cur | prev\)](#) 2011-09-02T15:27:04 [192.168.8.128](#) ([Talk](#)) (1,028 bytes) ([→Students](#)) ([undo](#))

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Research Tools 2011

Revision as of 2011-09-08T11:04:22 by [Schwehr](#) (Talk | contribs)
(diff) ← Older revision | Latest revision (diff) | Newer revision → (diff)

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Multibeam echosounder

From Wikipedia, the free encyclopedia

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History and Progression

[edit]

Multibeam echosounders, also known as **Swathe** (British English) or **Swath** (American English) echosounders, originated in the late 1950s, originally for military applications. They were developed in the 1970s by the **US Navy**, in conjunction with **General Instrument** to map large swaths of the **ocean floor** to assist the underwater navigation of its **submarine** force. Starting in the 1970s, companies such as General Instrument (now SeaBeam Instruments, part of **L3 Klein**) in the **United States**, Krupp Atlas (now **Atlas Hydrographic**) and Elac Nautik (now part of L3 Communications) in **Germany**, **Simrad** (now **Kongsberg Maritime**) in **Norway** and RESON in **Denmark** developed systems that could be mounted to the hull of large **ships**, and then small **boats** (as technologies improved and operating frequencies increased).

The first commercial multibeam is now known as the SeaBeam Classic and was put in service in May 1977 (Harold Farr, Marine Geodesy, Volume 4, Issue 2 1980 , pages 77 – 93) on the Australian survey vessel HMAS Cook. This system produced up to 16 beams across a 45-degree swath.

The second SeaBeam Classic installation was on the French Research Vessel Jean Charcot sometime after the Cook. The SB Classic arrays on the Charcot were damaged in a grounding and the SeaBeam was replaced with an EM120 in 1991. Although it seems that the original SeaBeam Classic installation was not used much, the others were widely used, and subsequent installations were made on many vessels.

SeaBeam Classic systems were subsequently installed on the US academic **research vessels** **USNS Thomas Washington (T-AGOR-10)** (Scripps Institution of Oceanography, University of California), the **USNS Robert D. Conrad** (Lamont-Doherty Earth Observatory of Columbia University) and the **RV Atlantis II** (Woods Hole Oceanographic Institution).



A multibeam image of the **USS Susan B. Anthony (AP-72)** shipwreck off coast of France.

Peter H Smith

Peter H. Smith graduated in 1969 from the **University of California Berkeley** in physics and later continued his education at the **University of Arizona** Optical Sciences Center graduating with a master's degree in 1977.

Smith has been employed at the UA's **Lunar and Planetary Laboratory** since 1978, starting as a Research Assistant and progressing step-by-step to a Senior Research Scientist. During this period, Smith participated in many of the seminal space missions that have explored the solar system.

During the **Pioneer Venus** mission in 1978, Smith created models of the energy sources that heat the surface of **Venus** to nearly 1000 degrees. **Pioneer Saturn**, in 1979, initiated nearly a decade of study of outer-planet atmospheres, particularly for **Jupiter** and **Titan**. Mysterious, cloud-enshrouded Titan became the focus for Smith's research which led to observations and mapping of the solid surface of Titan, Saturn's largest moon, using the **Hubble Space Telescope** in 1994. Working with Dr. Martin Tomasko, Smith became the Project Manager for a descent camera for the **Huygens** mission to the surface of Titan that landed in early 2005 and returned the first close-up images of Titan's surface.

In 1993, Smith started his association with the **Red Planet** after his Imager for **Mars Pathfinder** camera proposal was accepted by NASA for the Pathfinder mission. As the first lander to reach Mars since the two **Viking** missions in 1976, there was tremendous public interest as the camera returned the first images from the Martian surface on July 4, 1997. Day-by-day images of the alien landscape explored by the **Sojourner Rover** were featured on the front pages of newspapers and on the TV news networks. Since then Smith has built cameras for the **Mars Polar Lander** mission that crashed on the Martian surface in December 1999. Later, the 2001 Surveyor mission was cancelled because of the loss of Mars Polar Lander, grounding more UA-built cameras.

Despite these setbacks, Smith has continued to associate with Mars missions and is serving on the science team for the **Mars Exploration Rovers** that landed in January 2004. He also helped build the microscope for **Beagle 2**, a European lander that failed to return data upon its arrival to Mars in December 2003. Smith spent nearly two years managing the building of the 2005 **Mars Reconnaissance Orbiter HiRISE** camera for which Dr. Alfred McEwen of the UA is the Principal Investigator.

In fall 2003, after one and a half years of proposal development, Smith's **Phoenix** project was selected as the first **Scout mission to Mars** after a competitive **NASA** selection process. The Phoenix mission is valued at \$420 million, and Smith is fully responsible for all aspects of the mission. The spacecraft launched August 4, 2007, and will land in the northern polar region of Mars on May 25, 2008. The lander will conduct science experiments for 3 to 5 months as part of NASA's search for life in our solar system. The Phoenix name recalls the mythological bird that rises from the ashes of his predecessor. The Phoenix mission uses the mothballed 2001 lander with instruments delivered for both that mission and the failed Polar Lander mission.

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Peter Smith



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Peter Smith (scientist)

From Wikipedia, the free encyclopedia

Peter H. Smith is a Senior Research Scientist at the [Lunar and Planetary Laboratory](#) of the [University of Arizona](#), where he holds the inaugural [Thomas R. Brown Distinguished Chair in Integrative Science](#).^[1] He is also the [principal investigator](#) for the \$420 million robotic explorer [Phoenix](#) which landed at the north pole of the planet [Mars](#) on May 25, 2008.

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Education [edit]

Smith received his [bachelor's degree](#) in physics in 1969 from the [University of California, Berkeley](#) and his [master's degree](#) from the [University of Arizona Optical Sciences Center](#) in 1977.^[2] Since 1978, he has worked at the [University of Arizona Lunar and Planetary Laboratory](#), initially as a Research Assistant up to his present position as a Senior Research Scientist.

Space exploration missions [edit]

Smith worked on the [Pioneer Venus](#) mission of 1978 and the [Pioneer Saturn](#) mission of 1979, mapped the surface of [Saturn's](#) largest moon [Titan](#) using the [Hubble Space Telescope](#) in 1994, and became Project Manager for a descent camera on the [Huygens probe](#) that landed on Titan in 2005.

Smith designed the cameras for [Sojourner Rover](#) of the [Mars Pathfinder](#) mission, the ill-fated [Mars Polar Lander](#), and the subsequently cancelled [Mars Surveyor Lander](#). He helped to build the microscope for the ill-fated [Beagle 2](#), and managed the building of the 2005 [Mars Reconnaissance Orbiter HiRISE camera](#). He serves on

Peter Smith



Residence	United States
Citizenship	American
Fields	Physics
Institutions	University of Arizona, Lunar and Planetary Laboratory
Alma mater	University of California, Berkeley University of Arizona
Known for	Principal Investigator of Phoenix project

PuTTY: A Free Telnet/SSH Client

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[Mirrors](#) | [Updates](#) | [Feedback](#) | [Changes](#) | [Wishlist](#) | [Team](#)

PuTTY is a free implementation of Telnet and SSH for Windows and Unix platforms, along with an `xterm` terminal emulator. It is written and maintained primarily by [Simon Tatham](#).

The latest version is beta 0.62.

LEGAL WARNING: Use of PuTTY, PSCP, PSFTP and Plink is illegal in countries where encryption is outlawed. I believe it is legal to use PuTTY, PSCP, PSFTP and Plink in England and Wales and in many other countries, but I am not a lawyer and so if in doubt you should seek legal advice before downloading it. You may find [this site](#) useful (it's a survey of cryptography laws in many countries) but I can't vouch for its correctness.

Use of the Telnet-only binary (PuTTYtel) is unrestricted by any cryptography laws.

Latest news

2011-12-10 PuTTY 0.62 released

PuTTY 0.62 is out, containing only bug fixes from 0.61, in particular a [security fix](#) preventing passwords from being accidentally retained in memory.

Putty for ssh on MS Windows
connect using ssh to researchtools.ccom.nh
This only works at CCOM

```
Terminal Shell Edit View Window Help
schwehr — schwehr@researchtools: ~ — ssh — 80x24
Last login: Sat Jun 23 11:22:50 on ttys003
# schwehr@Catbox4-MBAir.local 1 $ cd && ssh researchtools
The authenticity of host 'researchtools (192.168.2.28)' can't be established.
RSA key fingerprint is e5:7d:5f:b9:c7:cd:ec:62:13:88:ef:46:12:c6:d5:3e.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'researchtools,192.168.2.28' (RSA) to the list of known hosts.
#####
**WARNING**WARNING**WARNING**

This is a UNH CCOM computer system. UNH CCOM computer systems are provided for the processing of authorized information only. All data contained on UNH CCOM computer systems are owned by UNH CCOM and may be monitored, intercepted, recorded, read, copied, or captured in any manner and disclosed in any manner by authorized personnel. THERE IS NO RIGHT OF PRIVACY IN THIS SYSTEM. System personnel may give to law enforcement officials any potential evidence of crime found on UNH CCOM computer systems. USE OF THIS SYSTEM BY ANY USER, AUTHORIZED OR UNAUTHORIZED, CONSTITUTES CONSENT TO THIS MONITORING, INTERCEPTION, RECORDING, READING, COPYING, OR CAPTURING and DISCLOSURE.

**WARNING**WARNING**WARNING**
Welcome to Ubuntu 11.04 (GNU/Linux 2.6.38-8-generic-pae i686)
```

NEVER USE TELNET

I am using the Mac Terminal here instead of Putty on MS Windows. ssh in the Terminal works in a similar way

by authorized personnel. THERE IS NO RIGHT OF PRIVACY IN THIS SYSTEM. System personnel may give to law enforcement officials any potential evidence of crime found on UNH CCOM computer systems. USE OF THIS SYSTEM BY ANY USER, AUTHORIZED OR UNAUTHORIZED, CONSTITUTES CONSENT TO THIS MONITORING, INTERCEPTION, RECORDING, READING, COPYING, OR CAPTURING and DISCLOSURE.

****WARNING**WARNING**WARNING****

Welcome to Ubuntu 11.04 (GNU/Linux 2.6.38-8-generic-pae i686)

* Documentation: <https://help.ubuntu.com/>

System information as of Sat Jun 23 14:25:37 EDT 2012

System load:	0.0	Processes:	93
Usage of /home:	1.5% of 21.54GB	Users logged in:	0
Memory usage:	53%	IP address for eth0:	192.168.2.28
Swap usage:	0%		

Graph this data and manage this system at <https://landscape.canonical.com/>

New release 'oneiric' available.

Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Apr 18 12:02:42 2012 from crabeater.ccom.nh

schwehr@researchtools:~\$ █

```
schwehr@researchtools:~$ who
schwehr pts/0      2012-06-23 14:25 (192.168.12.150)
schwehr pts/1      2012-06-23 14:31 (snipe.ccom.nh)
schwehr@researchtools:~$ ls
away example hw wx
schwehr@researchtools:~$ █
```

schwehr@researchtools:~\$ **ls -a**

.	.bash_aliases	.bash_logout	.emacs.d	hw	.lesshst	wx
..	.bash_aliases~	.bashrc	example	.ipython	.profile	
away	.bash_history	.cache	.gnupg	.irssi	.ssh	

schwehr@researchtools:~\$ **ls -la**

total 88

drwxr-xr-x	12	schwehr	domain users	4096	2012-06-23	14:32	.
drwxr-xr-x	24	root	root	4096	2011-10-18	09:41	..
drwxr-xr-x	2	schwehr	domain users	4096	2012-06-23	14:32	away
-rw-r--r--	1	schwehr	domain users	70	2011-09-26	15:47	.bash_aliases
-rw-r--r--	1	schwehr	domain users	51	2011-09-26	15:46	.bash_aliases~
-rw-----	1	schwehr	users	13069	2012-04-18	17:13	.bash_history
-rw-r--r--	1	schwehr	domain users	220	2011-08-25	15:48	.bash_logout
-rw-r--r--	1	schwehr	domain users	3353	2011-08-25	15:48	.bashrc
drwx-----	2	schwehr	domain users	4096	2011-08-25	15:48	.cache
drwxr-xr-x	3	schwehr	domain users	4096	2011-09-26	15:46	.emacs.d
drwxr-xr-x	2	schwehr	domain users	4096	2011-09-06	11:55	example
drwx-----	2	schwehr	users	4096	2011-08-31	18:10	.gnupg
drwx-----	4	schwehr	domain users	4096	2011-10-02	15:40	hw
drwxr-xr-x	3	schwehr	domain users	4096	2011-12-01	21:00	.ipython
drwx-----	2	schwehr	domain users	4096	2011-09-12	16:03	.irssi
-rw-----	1	schwehr	domain users	71	2012-04-18	12:06	.lesshst
-rw-r--r--	1	schwehr	domain users	675	2011-08-25	15:48	.profile
drwx-----	2	schwehr	domain users	4096	2011-12-01	19:54	.ssh

schwehr@researchtools:~\$ **ls -a**

.	.bash_aliases	.bash_logout	.emacs.d	hw	.lesshst	wx
..	.bash_aliases~	.bashrc	example	.ipython	.profile	
away	.bash_history	.cache	.gnupg	.irssi	.ssh	

schwehr@researchtools:~\$ **ls -la**

```
total 88
drwxr-xr-x 12 schwehr domain users 4096 2012-06-23 14:32 .
drwxr-xr-x 24 root root 4096 2011-10-18 09:41 ..
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:32 away
-rw-r--r-- 1 schwehr domain users 70 2011-09-26 15:47 .bash_aliases
-rw-r--r-- 1 schwehr domain users 51 2011-09-26 15:46 .bash_aliases~
-rw----- 1 schwehr users 13069 2012-04-18 17:13 .bash_history
-rw-r--r-- 1 schwehr domain users 220 2011-08-25 15:48 .bash_logout
-rw-r--r-- 1 schwehr domain users 3353 2011-08-25 15:48 .bashrc
drwx----- 2 schwehr domain users 4096 2011-08-25 15:48 .cache
drwxr-xr-x 3 schwehr domain users 4096 2011-09-26 15:46 .emacs.d
drwxr-xr-x 2 schwehr domain users 4096 2011-09-06 11:55 example
drwx----- 2 schwehr users 4096 2011-08-31 18:10 .gnupg
drwx----- 4 schwehr domain users 4096 2011-10-02 15:40 hw
drwxr-xr-x 3 schwehr domain users 4096 2011-12-01 21:00 .ipython
drwx----- 2 schwehr domain users 4096 2011-09-12 16:03 .irssi
-rw----- 1 schwehr domain users 71 2012-04-18 12:06 .lesshst
-rw-r--r-- 1 schwehr domain users 675 2011-08-25 15:48 .profile
drwx----- 2 schwehr domain users 4096 2011-12-01 19:54 .ssh
```

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drwx----- 2 schwehr domain users 4096 2011-08-25 15:48 .cache
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drwx----- 2 schwehr domain users 4096 2011-12-01 19:54 .ssh
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drwxr-xr-x 24 root root 4096 2011-10-18 09:41
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:32
-rw-r--r-- 1 schwehr domain users 70 2011-09-26 15:47
-rw-r--r-- 1 schwehr domain users 51 2011-09-26 15:46
-rw----- 1 schwehr users 13069 2012-04-18 17:13
-rw-r--r-- 1 schwehr domain users 220 2011-08-25 15:48
-rw-r--r-- 1 schwehr domain users 3353 2011-08-25 15:48
drwx----- 2 schwehr domain users 4096 2011-08-25 15:48
drwxr-xr-x 3 schwehr domain users 4096 2011-09-26 15:46
drwxr-xr-x 2 schwehr domain users 4096 2011-09-06 11:55
drwx----- 2 schwehr users 4096 2011-08-31 18:10
drwx----- 4 schwehr domain users 4096 2011-10-02 15:40
drwxr-xr-x 3 schwehr domain users 4096 2011-12-01 21:00
drwx----- 2 schwehr domain users 4096 2011-09-12 16:03
-rw----- 1 schwehr domain users 71 2012-04-18 12:06
-rw-r--r-- 1 schwehr domain users 675 2011-08-25 15:48
drwx----- 2 schwehr domain users 4096 2011-12-01 19:54
```

```
.
..
away
.bash_aliases
.bash_aliases~
.bash_history
.bash_logout
.bashrc
.cache
.emacs.d
example
.gnupg
hw
.ipython
.irssi
.lesshst
.profile
.ssh
```

```
Terminal Shell Edit View Window Help
schwehr — schwehr@researchtools: ~ — ssh — 80x24
-rw-r--r--  1 schwehr domain users  3353 2011-08-25 15:48 .bashrc
drwx----- 2 schwehr domain users 4096 2011-08-25 15:48 .cache
drwxr-xr-x  3 schwehr domain users 4096 2011-09-26 15:46 .emacs.d
drwxr-xr-x  2 schwehr domain users 4096 2011-09-06 11:55 example
drwx----- 2 schwehr users        4096 2011-08-31 18:10 .gnupg
drwx----- 4 schwehr domain users 4096 2011-10-02 15:40 hw
drwxr-xr-x  3 schwehr domain users 4096 2011-12-01 21:00 .ipython
drwx----- 2 schwehr domain users 4096 2011-09-12 16:03 .irssi
-rw-----  1 schwehr domain users   71 2012-04-18 12:06 .lesshst
-rw-r--r--  1 schwehr domain users  675 2011-08-25 15:48 .profile
drwx----- 2 schwehr domain users 4096 2011-12-01 19:54 .ssh
drwxr-xr-x  3 schwehr domain users 4096 2011-09-06 06:28 wx
schwehr@researchtools:~$
schwehr@researchtools:~$
schwehr@researchtools:~$
schwehr@researchtools:~$ # Anything that starts with pound/number is a comment
schwehr@researchtools:~$ ls # This list files
away example hw wx
schwehr@researchtools:~$ touch myship # Create a file or update time
schwehr@researchtools:~$ ls -l myship
-rw-r--r--  1 schwehr domain users 0 2012-06-23 14:39 myship
schwehr@researchtools:~$ date
Sat Jun 23 14:39:18 EDT 2012
schwehr@researchtools:~$
```

```
Terminal Shell Edit View Window Help
schwehr — schwehr@researchtools: ~ — ssh — 80x24
-rw-r--r--  1 schwehr domain users    675 2011-08-25 15:48 .profile
drwx----- 2 schwehr domain users  4096 2011-12-01 19:54 .ssh
drwxr-xr-x  3 schwehr domain users  4096 2011-09-06 06:28 wx
schwehr@researchtools:~$
schwehr@researchtools:~$
schwehr@researchtools:~$
schwehr@researchtools:~$ # Anything that starts with pound/number is a comment
schwehr@researchtools:~$ ls # This list files
away example hw wx
schwehr@researchtools:~$ touch myship # Create a file or update time
schwehr@researchtools:~$ ls -l myship
-rw-r--r--  1 schwehr domain users  0 2012-06-23 14:39 myship
schwehr@researchtools:~$ date
Sat Jun 23 14:39:18 EDT 2012
schwehr@researchtools:~$ touch anothership
schwehr@researchtools:~$ ls -l
total 16
-rw-r--r--  1 schwehr domain users    0 2012-06-23 14:41 anothership
drwxr-xr-x  2 schwehr domain users  4096 2012-06-23 14:32 away
drwxr-xr-x  2 schwehr domain users  4096 2011-09-06 11:55 example
drwx----- 4 schwehr domain users  4096 2011-10-02 15:40 hw
-rw-r--r--  1 schwehr domain users    0 2012-06-23 14:39 myship
drwxr-xr-x  3 schwehr domain users  4096 2011-09-06 06:28 wx
schwehr@researchtools:~$
```

schwehr@researchtools:~\$ # I typed "clear" to hide the pervious stuff

schwehr@researchtools:~\$ mkdir a-folder

schwehr@researchtools:~\$ mkdir another-folder

schwehr@researchtools:~\$ mkdir Another-Folder

schwehr@researchtools:~\$ ls -l

total 28

drwxr-xr-x	2	schwehr	domain	users	4096	2012-06-23	14:44	a-folder
drwxr-xr-x	2	schwehr	domain	users	4096	2012-06-23	14:44	another-folder
drwxr-xr-x	2	schwehr	domain	users	4096	2012-06-23	14:45	Another-Folder
-rw-r--r--	1	schwehr	domain	users	0	2012-06-23	14:41	anothership
drwxr-xr-x	2	schwehr	domain	users	4096	2012-06-23	14:32	away
drwxr-xr-x	2	schwehr	domain	users	4096	2011-09-06	11:55	example
drwx-----	4	schwehr	domain	users	4096	2011-10-02	15:40	hw
-rw-r--r--	1	schwehr	domain	users	0	2012-06-23	14:39	myship
drwxr-xr-x	3	schwehr	domain	users	4096	2011-09-06	06:28	wx

schwehr@researchtools:~\$

```
Terminal Shell Edit View Window Help
schwehr — schwehr@researchtools: ~ — ssh — 80x24
schwehr@researchtools:~$ # I typed "clear" to hide the pervious stuff
schwehr@researchtools:~$ mkdir a-folder
schwehr@researchtools:~$ mkdir another-folder
schwehr@researchtools:~$ mkdir Another-Folder
schwehr@researchtools:~$ ls -l
total 28
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:44 a-folder
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:44 another-folder
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:45 Another-Folder
-rw-r--r-- 1 schwehr domain users 0 2012-06-23 14:41 anothership
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:32 away
drwxr-xr-x 2 schwehr domain users 4096 2011-09-06 11:55 example
drwx----- 4 schwehr domain users 4096 2011-10-02 15:40 hw
-rw-r--r-- 1 schwehr domain users 0 2012-06-23 14:39 myship
drwxr-xr-x 3 schwehr domain users 4096 2011-09-06 06:28 wx
schwehr@researchtools:~$ rmdir Another-Folder
schwehr@researchtools:~$ ls another
another-folder/ anothership
schwehr@researchtools:~$ ls another
another-folder/ anothership
schwehr@researchtools:~$ ls another-folder/
```

Type "ls an" then press tab and the shell tries to complete the file name with "another." I pressed "-" and then tab again.

```
Terminal Shell Edit View Window Help
schwehr — schwehr@researchtools: ~ — ssh — 80x24
schwehr@researchtools:~$ ls
a-folder  another-folder  anothership  away  example  hw  myship  wx
schwehr@researchtools:~$ mv myship myship2 # move is the same as rename
schwehr@researchtools:~$ ls -l
total 24
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:44 a-folder
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:44 another-folder
-rw-r--r-- 1 schwehr domain users 0 2012-06-23 14:41 anothership
drwxr-xr-x 2 schwehr domain users 4096 2012-06-23 14:32 away
drwxr-xr-x 2 schwehr domain users 4096 2011-09-06 11:55 example
drwx----- 4 schwehr domain users 4096 2011-10-02 15:40 hw
-rw-r--r-- 1 schwehr domain users 0 2012-06-23 14:39 myship2
drwxr-xr-x 3 schwehr domain users 4096 2011-09-06 06:28 wx
schwehr@researchtools:~$
```