

New Machine Configuration

MAC

Following are some software that might be useful on your machine and how to install.

VPN Client

You can find instructions for downloading and installing Cisco AnyConnect VPN client here <https://techservices.illinois.edu/services/virtual-private-networking-vpn/download-and-set-up-the-vpn-client>

Office

You can download and install office on 5 machines. You can download it (after logging in) from <https://www.office.com/>

JetBrains

This is the software used by our group to development. Using an IDE will make your productivity 10 times higher. Depending on what project you work on you might need some of their tools. Best is to start with the toolbox <https://www.jetbrains.com/toolbox/app/>. You will also need to ask for a license, contact [Rob Kooper](#) for one.

Once you have installed the toolbox you can select to install other tools, such as:

pyCharm : development tool for Python Development

Intelij Idea : development tool for Scala/Java Development

WebStorm : development tool for web Development

there are many others as well.

Brew

Package manager for MAC allows to install many useful command line utilities (including java and python), see <https://brew.sh/>

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

Java

This assumes you have brew installed already. To install java 8 for example you can use:

```
brew tap AdoptOpenJDK/openjdk
```

```
brew cask install adoptopenjdk8
```

to make brew cleanup to work you might have to run

```
rm /usr/local/Homebrew/Library/Taps/homebrew/homebrew-cask-versions/Casks/adoptopenjdk8.rb
```

Python

Install pip

```
sudo easy_install pip
```

Install virtualenv

```
sudo pip install virtualenv
```

Install python 3

```
brew install python
```

Kerberos

Allows you to ssh to any NCSA host with no password (assumes you use same login on your mac as NCSA)

Run the following as root:

```
cat << EOF > /etc/krb5.conf
[libdefaults]
    ignore_acceptor_hostname = true
    default_realm = NCSA.EDU
    allow_weak_crypto = true
    dns_lookup_kdc = true
    forwardable = true
    ticket_lifetime = 90000
    renew_lifetime = 630000
    no-address = true
[realms]
    NCSA.EDU = {
        default_domain = ncsa.uiuc.edu
        kdc = kerberos.ncsa.uiuc.edu:88
        kdc = kerberos-1.ncsa.uiuc.edu:88
        kdc = kerberos-2.ncsa.uiuc.edu:88
        admin_server = kadmin.ncsa.uiuc.edu:749
    }
[domain_realm]
    .ncsa.illinois.edu = NCSA.EDU
    .ncsa.uiuc.edu = NCSA.EDU
    .ncsa.edu = NCSA.EDU
EOF

cat << EOF >> /etc/ssh/ssh_config
    GSSAPIAuthentication yes
    GSSAPIDelegateCredentials yes
EOF

sed -i~ 's/pam_krb5.so/& default_principal/' /etc/pam.d/authorization
sed -i~ 's/pam_krb5.so/& default_principal/' /etc/pam.d/screensaver
```

Windows

Not much here

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Office