

#### Three Ways to Use WRDS

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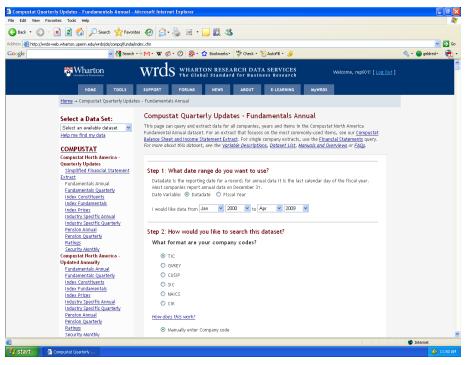


#### Three Ways to Use WRDS

- WRDS System: Internet based. All files are in SAS format.
- 3 complementary ways of using WRDS:
  - Web Query
  - Unix environment (SAS, Fortran)
  - PCSAS (SAS)
- You can download the same exact data using any of the three methods. Different strengths.



## Web-query Characteristics



- Just need a browser.
- Point and click to choose the data items.
- You can choose among different output formats.
- Once the output is ready, you may save it in your PC.

## Web-query Benefits

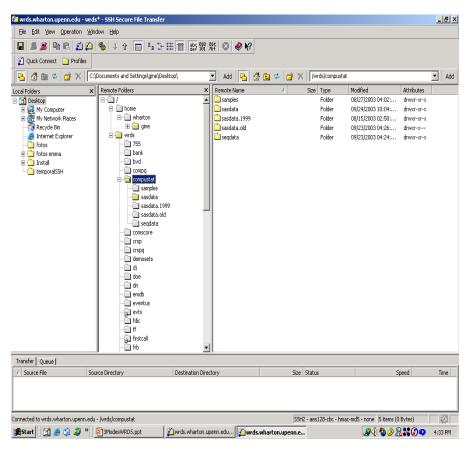
- Easy way to explore data: Immediate sense of the data. Quick results.
- Simple yet powerful downloads:
  - up to 2 gigabytes of data per download.
- Easy to import into other statistical packages: STATA, Matlab, Excel.
- Link to Support materials.
- Access to Search and other Tools.

## Some Web-query Examples

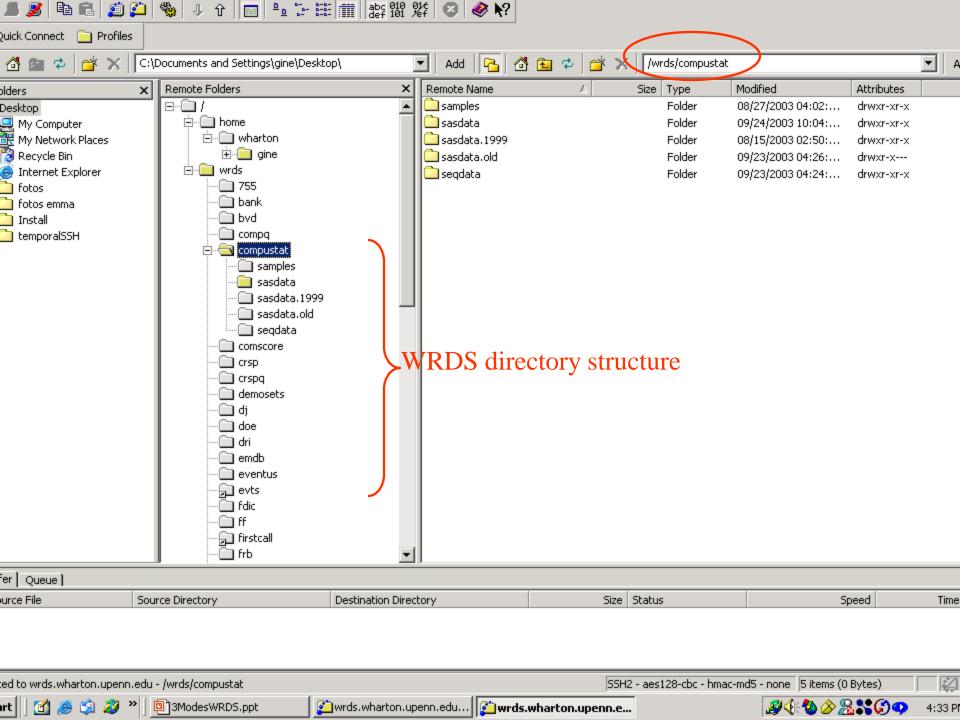
- Create dataset of stock returns for a day, month, year, one firm or all firms with a couple clicks of a mouse (CRSP).
- Determine if more than one stock has used the ticker symbol ABC on the NYSE over the last 40 years and find the historical CUSIPs for each, as well as current CRSP and COMPUSTAT ID codes.
- Find all companies with sales greater than 1 billion and total assets greater than 5 billions in 1997 and more than 30 years of publicly reported financial statements. (COMPUSTAT: actives and inactives).



#### **Unix Characteristics**



- Secure connection to the machine with SSH client: wrds.wharton.upenn.edu
- Unix code & programming in SAS. No license needed.
- Individual disk space:
   750MB of permanent
   storage in directory:
   /home/schoolname/username
- 2 TB of temporary disk space.



s-support@wharton.upenn.edu and be sure to use your academic email ount, which we need to properly track and reply to inquiries.

you need to change your password, use the command 'password help'.

information on the WRDS directory structure and quotas, use the mand 'WRDS UNIX'.

fdic/

firstcall@

cstseg.sas

cusper.sas

cusperl.sas

dlybonds c/

dsf-old.sas

dlybonds for/

cti.f

dec.f

dec.sas

dist.f

cti.sas

cststksampl.for

ff/

frb/

fx/

iri/

irrc/

issm/

lspd/

misc/

nas03axs/

nas99axs/

event4.sas

evntcall.sas

evntcal2.sas

evntcal3.sas

famablis.sas

abm.f

abx.f

mbm.f

mbi.sas

mbm.sas

evntcal2a.sas

pacap/

phlx/

govpx/

gsi/

ibes/

govpxaxs/

gsitrial/

sasdata.old/ seqdata/

dsf.f

dsi.f

dsf.sas

dsfm.sas

dsi.sas

dsic.sas

erdport.sas

ermport.sas

event0.sas

eventl.sas

event2.sas

event2a.sas

y: not setting tostop because it has been disabled s(~)% pwd

```
me/wharton/gine
```

doe/

dri/

emdb/

evts@

eventus/

sasdata/

s(~)% cd /wrds s(/wrds)% ls

Edit <u>View</u>

Window

comscore/

crsp/

crspq/

demosets/

pq/ pustat/

di/ s(/wrds)% s(/wrds)%

s(/wrds)% cd crsp s(/wrds/crsp)% ls

s(/wrds/crsp)% cd samples

s(/wrds/crsp/samples)% ls PAccess/ PAccess.000/

afrench92/ aimsl.f ebt.sas

eader.sas avmts.sas

uotes.sas ield.sas dport.sas

m.sas s(/wrds/crsp/samples)%

thind.sas

#### ected to wrds.wharton.upenn.edu

samples/

cstann.sas

cstbif.sas

cstbna.sas cstbna2000.sas

cstbnq.sas

cstgeo.sas

cstpde.sas

cstqtr.sas

cstann2000.sas

cstbnq2000.sas

cstpde2000.sas

cstqtr2000.sas

Unix window for programming

nas00axs/ naslinks/ taq98axs/ taq/ taq93axs/ nas0laxs/ nastraq/ taq00axs/ taq94axs/ taq99axs/ nas02axs/ optionm/ taq0laxs/ taq95axs/ taglinks/

taq02axs/

taq03axs/

event3.sas mbx.f msi.sas

mhist.sas

msi.f

msf-old.sas

mbx.sas msic.sas mevent2.sas mfdb.sas rebal.sas mhist.f

prograph.sas riskfree.sas ror.sas

sp500.f

taq96axs/

taq97axs/

tfn@

tfnaxs/

msf.f sp500.sas msf.sas tbill.sas msfm.sas tickper.sas msfnames.sas yrcap.f



### **Unix Disk Space**

Permanent disk space:

750 MB in home/<school-code>/username

 Temporary disk space (2TB) for processing programs and storage.

SAStemp directories: sastemp0 – sastemp14

- Files and directories older than 48 hours are automatically removed.
- If any one of the SAStemp directories is more than 95% full, the largest file or directory will be removed.
- Files located here are not backed up!

#### **Unix Benefits**

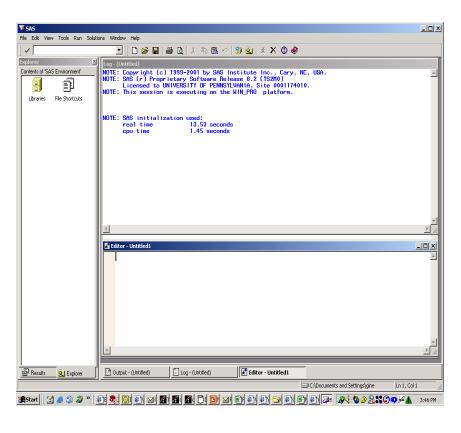
- Best suited for research intensive tasks.
- More flexible and powerful data download:
  - run your customized programs.
  - pull data from several sources at the same time.
- Merge databases.
- Store your programs in designated space.
- Make use of the powerful E12K Sun Fire to run demanding programs.

## Some Unix Examples

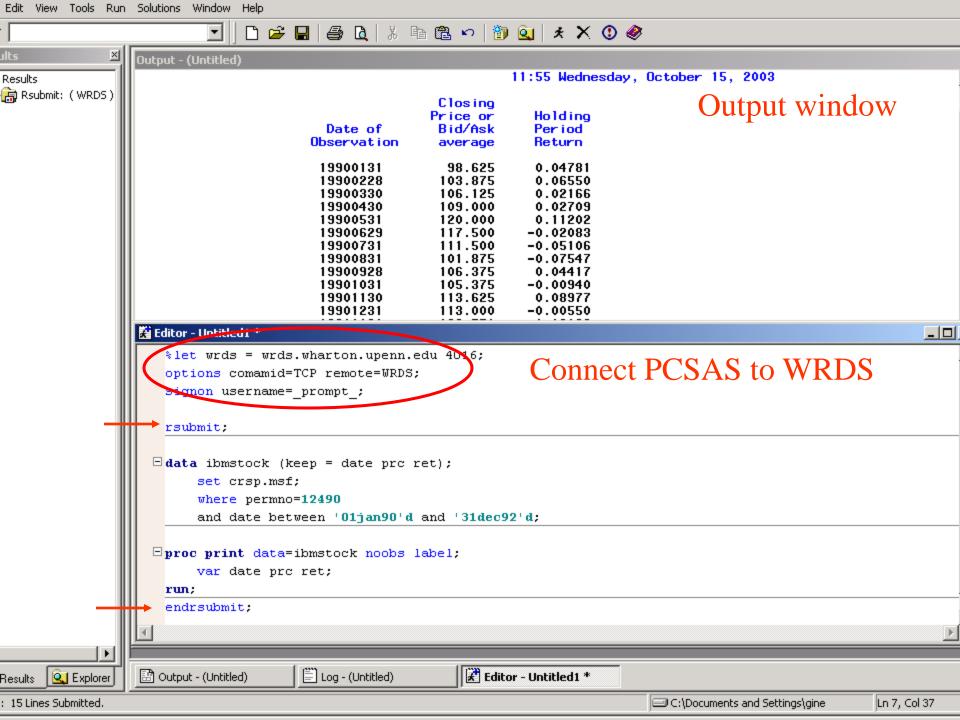
#### Research intensive examples

- Explore whether executive stock-based compensation plans influence the financial performance and decisions of a firm. (COMPUSTAT and EXECUCOMP).
- Link financial statement reports to stock market performance (CRSP and COMPUSTAT MERGED database).
- Compare actual earnings to analysts projections and run an event study around earning surprise days (IBES and COMPUSTAT).
- Compute betas and test for additional factors and/or excessive volatility in stock prices (CRSP).

#### **PCSAS** Characteristics



- Windows software installed on your desktop.
- Standalone: your dataset in your PC.
- Remote access to a data source: connecting to wrds.wharton.upenn.ed
- Access Unix disk space



#### **PCSAS** Benefits

- Best suited for research intensive tasks.
- Graphical features and windows, more user friendly.
- Easier to edit programs and debug.
- No need of Unix code:
  - Move across windows to view program, output and log file.

#### Conclusions

- The bulk of WRDS users do have access to the data using any of the three methods.
- We want to encourage especially PhDs to make use of the Unix machine and to start using PCSAS.
- The Web is easy and powerful, however Unix and PCSAS will take the user to a new level of working efficiently.