

Getting Started
with
Wharton Research Data Services

<http://wrds.wharton.upenn.edu>
wrds-support@wharton.upenn.edu

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Welcome to **Wharton Research Data Services!**

Wharton Research Data Services, or WRDS, is an Internet-based business data research service from The Wharton School at the University of Pennsylvania. Developed in 1993 to support faculty research at Wharton, the service has since evolved to include over 70 institutions including:

Stanford University Northwestern University
Harvard University University of Chicago
London Business School Massachusetts Institute of Technology and more

WRDS provides access to COMPUSTAT, CRSP, IBES/First Call, NYSE-TAQ, Global Insight, OptionMetrics and other important business research databases in a manner that gives universities several key benefits:

Outsourced Data Management. The Wharton Computing staff receives the data directly from providers and posts the data to our system in SAS data sets. The data is warehoused at Wharton and access is provided to subscribers over the Internet. You concentrate on research; we handle all the data management issues.

Access to Multiple Data Sources Simultaneously. WRDS provides a common interface to a variety of databases, simplifying extraction and increasing productivity. You no longer have to spend countless hours programming and decoding tapes or writing Fortran access programs. The information is easily retrievable over the Internet--anytime, anywhere--via point-and-click web query pages, SAS/PC Connect, or a secure shell (SSH) log-in session, whichever method best suits your needs.

Professional Technical and Research Support. Our staff of doctoral-level research specialists is available to you on-line. They can assist you with difficulties pertaining to database access, data queries, and programming in SAS, FORTRAN, or C.

Integrated Tools. WRDS provides sophisticated software tools and sample programs for a wide variety of applications, including security analysis, conducting event studies, and testing asset-pricing models using Fama-French portfolios. In addition, complete financial statements for a single company can be downloaded using a simple web interface.

Classroom Application. Access to historical financial data on WRDS is also available to students using special class accounts that may be requested by any standing faculty of member institutions. One-click, IP-based access in labs and libraries is also offered.

Continual Improvements. We are continuously improving and adding value to WRDS. Our current efforts are concentrated on support for comprehensive international databases, as well as state-of-the-art analytical tools for faculty research and new applications for students and classroom use.

We hope you enjoy your new WRDS accounts. We are confident you will find the ease of access, abundance of data, and system support a significant benefit to your research and teaching endeavors.

Enjoy!
Sincerely,
WRDS Staff

1.1 Eligibility for Access

All current faculty, staff, and students are eligible for web access to WRDS. Individual (faculty, doctoral and research assistant) accounts, which allow SSH access, are restricted to the business school and economics department (where applicable). Unfortunately, alumni members of the community, research colleagues outside the university, and other persons not actively employed or registered with the university do not qualify.

1.2 Applying for An Account

Step 1:

- Point your web browser to <http://wrds.wharton.upenn.edu>

Step 2:

- In the center of the login screen, you will see a link entitled “account request.”
- Click on that link. Then click on the link entitled “new account.”

Step 3:

- Fill out the account request form.

Click the box entitled ‘submit request.’

1.3 Types of Accounts

Faculty: Faculty accounts are available to all standing faculty of member institutions. Standard accounts allow unlimited access via web, SSH, and/or FTP, and include 25 MB of permanent disk storage.

Administrative and Staff: Administrative accounts can only be requested by support personnel (i.e. the WRDS Representative) of member institutions. Administrative accounts allow unlimited access via web, SSH, and/or FTP, and include 25 MB of permanent disk storage.

PhD student: PhD accounts are available to all current Ph.D. candidates of member institutions. Standard accounts allow unlimited access via web, SSH, and/or FTP, and include 25 MB of permanent disk storage.

Research Assistant: Research accounts are available to graduate and undergraduate students performing research for a faculty member. Research Accounts allow access via web, SSH, and/or FTP, and include 25 MB of permanent disk storage.

Class: Class accounts may be requested by standing faculty of member institutions and are used to access the WRDS web interface. These accounts are primarily for student usage that is associated with a specific class and all students in the class share the same password. These accounts do NOT include disk storage and they expire at the end of the semester.

Library/Lab: Library/Lab accounts are used to access WRDS using IP authentication; thereby, bypassing the need to remember or keep secure a shared password. We simply need to know the IP addresses and corresponding hostnames. Expiration dates are not set for these accounts.

1.4 Databases Available

Although WRDS provides access to a wide variety of databases, users are only given authorization to those to which their university subscribes. If you attempt to access a database to which your university does not subscribe, you will receive the following error message:

“User does not have appropriate authorization level for file.”

Below is a list of the databases available for WRDS. Your access will depend on your school’s licenses. For more information on data access and permissions, see the "My Datasets" link in the MY.WRDS section of our web site and peruse the "Data Lists" for the various subdivisions of data products and subscription levels.

Standard and Poor’s Compustat©:

- Industrial, Full Coverage and Research
- Canadian Industrial
- Business Industry Segments
- Business Geographic Segments
- Price, Dividends, and Earnings
- Bank
- Executive Compensation

Standard and Poor’s Global©:

- Industrial/Commercial
- Financial Services
- Issues
- Currency

Center for Research in Security Prices© (CRSP):

- NYSE/AMEX/NASDAQ Stocks
- Government Bonds
- Indices/Portfolio Assignments
- CRSP/Compustat Merged Database

Eventus

- Event Study Software

Global Insight :

- DRI Basic Economics
- DRI International

GovPX, Inc.©:

- Treasury Bonds, Tick-by-Tick

Institutional Brokers Estimate System© (I/B/E/S):

- Detail and Summary History
- Summary History

IRRC

- Takeover Defenses

NYSE Trade and Quote© (TAQ):

- Consolidated Trades and Quotes

OptionMetrics

- Ivy DB

The NASDAQ Stock Market, Inc.©:

- NASTRAQ

Thomson Financial Services, Inc.©:

- Mutual Fund Holdings
- Institutional (13f) Holdings
- Insider

1.5 Future Resources

To provide clients with an ever-expanding resource, we are continually negotiating with new vendors about adding a variety of datasets to WRDS. Please visit our electronic newsletter, wrds.News, for further information at wrds.wharton.upenn.edu/news/index.shtml.

London Business School©:

- London Share Price Database

Bureau Van Dijk ©:

- Amadeus
- Osiris
- Bankscope
- Isis

Sandra Ann Morsilli Pacific-Basin Capital Markets Research Center

- PACAP Databases

1.6 Accessing the Data

WRDS may be accessed either through a web interface or a UNIX login session. After January 28, 2003, users may no longer connect to WRDS using the telnet protocol. A Secure Shell (“SSH”) program should be used instead. An account with username and password authorization is required to access WRDS using either method.

Web Interface:

To access WRDS via the Web, begin by pointing your browser <http://wrds.wharton.upenn.edu>. The WRDS web site serves our users in three ways. First, it offers the documentation and description of databases available. Each database is accompanied by a general description, various components of the database, descriptions of variables, and documentation. Second, users may access the database using the query forms. Users can search and download information using these pages by entering their own search criteria. Finally, users can submit an account request, a restore request, or technical questions with this access method.

SSH:

You may also make an SSH connection to wrds.wharton.upenn.edu with a WRDS-issued username and password. Once logged in, you will begin at your home directory.

The directory structure for the data is as follows:

- `/wrds/crsp/`
- `/wrds/compustat/`
- `/wrds/fdic/` etc.

Each database directory contains subdirectories for the data files and sample programs.

- `/wrds/crsp/sasdata`
- `/wrds/crsp/samples`

Each database directory contains subdirectories. We have several documents that provide step-by-step instructions on how to SSH to WRDS and how to retrieve data with FORTRAN and SAS programs (see Section 3.2). They are in MS Word format and can be easily accessed.

Contact Information

2.1 Vendor Contacts

If you wish to add databases to your WRDS service, please contact the appropriate vendor, listed below. Once you have completed the paperwork, he or she will notify us and the new permissions will be implemented within one business day.

Contact	Phone	Fax	E-mail
Compustat (US):			
Andy Halula	(800) 525-8640 x4458	(303) 721-4677	andy_halula@standardandpoors.com
Jennifer Bendell	(800) 525-8640 x4150	(303) 721-4677	jennifer_bendell@standardandpoors.com
CRSP:			
Tracy Russell	(773) 702-2769	(773) 702-3036	subscriptions@crsp.uchicago.edu
Global Insight (Includes DRI):			
Todd Eisner	(212) 884-9516		todd.eisner@globalinsight.com
Eventus:			
Arnie Cowan	(760) 923-8748		arnie@eventstudy.com
GovPX:			
Loretta Ferrentino	(212) 693-1200 x228	(212) 786-0022	lferrent@govpx.com
I/B/E/S:			
Pamela Grant	(646) 822-2862	(646) 822-2878	img.academic@tfn.com
IRRC:			
Carol Bowie	(202) 833-7655		carol.bowie@irrc.org
NASTRAQ:			
Tim McCormick	(301) 978-8222		Tim.McCormick@nasdaq.com
OptionMetrics:			
David Hait	(212) 918-1861		dhait@optionmetrics.com
TAQ:			
Chris Geickel	n/a	n/a	taqorders@nyse.com
Thomson Financial:			
Nathan Wolaver	(646) 822-3491	(646) 822-2010	nathan.wolaver@tfn.com

2.2 WRDS Representative

These are the responsibilities of your WRDS Representative:

- 1) Serve as a liaison between the WRDS staff and the users at the university. Any notices regarding system upgrades, the addition of new vendors, scheduled maintenance, etc. will be sent to the representative and he or she will simply forward this information to the users.
- 2) Monitor account requests by verifying that a requestor is indeed standing faculty, a Ph.D. student, or an authorized researcher/ administrator at the university. Whenever a user from your institution submits an account request, we will send you an email notification. Simply go to the URL indicated in the message and follow the instructions to approve the request. After we receive your approval, we will create the account and send the user an e-mail message with a special URL and instructions for setting the account password and logging into WRDS.
- 3) Attend an afternoon of training at The Wharton School. (optional)

2.3 WRDS Administration

For information concerning your subscription, details on upgrading your package, or the status on negotiations with future data providers, please send an e-mail to: wrds@wharton.upenn.edu or contact us at 215-898-9065.

Additional Help

3.1 Technical and Research Support

Our staff of technical and research specialists may be reached at wrds-support@wharton.upenn.edu. They are available to assist you with difficulties pertaining to database access, data queries, and programming in SAS, FORTRAN, or C. If you request support related to a particular program which you are unable to execute successfully, **please copy the program into the body of your e-mail message for a quicker response**. This is helpful for detecting any errors in your program.

3.2 Electronic Resources

Additional resources are available from any WRDS web page by clicking on the “support” tab located at the top of your screen. You will find several listings:

- **WRDS FAQ** (Frequently Asked Questions): This resource contains the most detailed information on using our service including a system overview, data content and access, and extensive help on using SAS and FORTRAN programs to extract data.
- **SAS FAQ**: Compiled by one of our technical specialists, this is an excellent resource for users just getting started with SAS.
- **Online Manuals**: All electronic manuals published by our vendor providers (i.e. CRSP) are available under this link. If you do not see a particular manual you are interested in, please contact the vendor directly (see Vendor Contact information, Section 2.1) for a copy.

- **Downloads:** TCP script for connecting to WRDS via SAS/CONNECT.
- **Restore Request:** Electronic form to be submitted in the event output is lost (see Section 3.4)

3.3 Changing Your Password

You may change your WRDS password by SSH or web access.

By SSH:

Step 1:

- SSH to wrds.wharton.upenn.edu
- At the system prompt, enter the following: **passwd**

Step 2:

- You will be prompted for your old password. Type in your current password and then press the Enter key.

Step 3:

- You will be asked for the new password. Type in a new password. Your password should be at least 6 characters long. On Unix systems passwords are case sensitive: lower-case and uppercase letters are different. To avoid problems, it's a good idea to use only lower-case letters and numbers. The password does not appear on the screen when you type it.

Step 4:

- To ensure you typed your new password correctly, you are asked to enter it again. Type in your new password again. If you typed the same password both times, the system returns to the system prompt. From now on, use this password to log on to this system. If you make a mistake typing your password, you'll receive an error message, and the system will not change your password. If this happens, repeat Steps 2 through 4.

By WEB:

Go to <https://wrds.wharton.upenn.edu/changepassword/index.shtml> and follow the instructions.

3.3 Lost Password

Go to <http://wrds.wharton.upenn.edu/lostpassword/index.shtml> and follow the instructions.

If you have any further questions, please send e-mail to **wrds-support@wharton.upenn.edu**.

3.4 Lost Output

In this event, please submit a **Restore Request**, available under the Support tab. Please allow one business day for processing.