



Getting Started with Wharton Research Data Services

The Johns Hopkins University

<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 100 institutions.

WRDS provides web-based access to these highly specialized, business research databases to which the Johns Hopkins University subscribes, as well as some additional resources:

- Center for Research in Security Prices (CRSP) U.S. Stock File
- Global Insight (DRI Basic Economics, DRI International)
- NYSE Trade and Quote (TAQ)
- Standard and Poor's Compustat
- Standard and Poor's Execucomp

Several key benefits include:

Web-Based Access From Any Computer

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; WRDS handles the data management issues.

Simultaneous Access to Multiple Data Sources. WRDS provides a common interface to a variety of databases, simplifying extraction and increasing productivity. 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) login session, whichever method best suits your needs.

Professional Technical and Research Support. WRDS doctoral-level research specialists can assist 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 is also available to students through special class accounts requested by the WRDS administrator or JHU faculty who meet eligibility and use requirements.

Continual Improvements. WRDS continuously improves and adds value to its service. 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.

1.1 Eligibility for Access

All current faculty, staff, and students at The Johns Hopkins University who are actively registered in JHED (<http://jhed.jhmi.edu/>) and have an active *jhmi.edu* e-mail address in their JHED record are eligible for web access to WRDS for academic research only. Access for part-time or visiting faculty is contingent on proof of current employment from the Dean's Office. Individual accounts (sect. 1.3), which allow SSH access, are restricted to the academic departments engaged in business and economics research at JHU. 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.'

Step 4:

- Once you submit an Account Request, WRDS will e-mail your representative for approval.
- After receiving the approval, we will create the account and e-mail a special URL and instructions for setting the password and logging into WRDS.

Step 5:

- Log into WRDS to use your new account from anywhere in the world.

1.3 Types of Accounts

Faculty: Faculty accounts are available to all current *full-time* faculty of the Johns Hopkins University who meet the eligibility requirements in Section 1.1. Standard accounts allow unlimited access via web, SSH, and/or FTP, and include 750 MB of home/projects storage. Faculty will have their own password access; this password is to remain confidential and is not to be shared with any other individual.

Visitor (Part-time Faculty/Staff/Visitor): Visitor accounts are available to staff and visiting faculty (non-permanent or part-time position) of the Johns Hopkins University who meet the eligibility requirements in Section 1.1. These accounts are subject to additional review and may not be used after the visiting appointment ends. The WRDS Rep will choose to approve this person as a visitor. The guidelines for "visitors" require a formal relationship between the institution and the individual—the individual is being paid to be at the university or has a formal letter of appointment (from a Dean) to an unpaid position. This generally precludes co-authors and PhD candidates. The user will have to accept additional Terms of Use prior to access. Standard accounts allow unlimited access via web, SSH, and/or FTP, and include 750 MB of home/projects storage. Faculty will have their own password access; this password is to remain confidential and is not to be shared with any other individual

Masters (Masters Students): Masters accounts are available to all current masters students of the Johns Hopkins University. These accounts allow unlimited access via the WRDS website. Masters students will have their own password access; this password is to remain confidential and is not to be shared with any other individual. These accounts provide access only and do NOT include storage. Masters accounts will expire at the end of the semester. Students can renew accounts directly with the JHU WRDS administrator.

PhD (PhD Students): These accounts are available to all current PhD students of the Johns Hopkins University who meet the eligibility requirements in Section 1.1. Standard accounts allow unlimited access via web, SSH, and/or FTP, and include 750 MB of home/projects storage. Students will have their own password access; this password is to remain confidential and is not to be shared with any other individual. Student accounts will expire at the end of the term. Students may renew their accounts through the JHU WRDS administrator.

Research Assistant: Research accounts are available to currently enrolled students of the Johns Hopkins University who are performing research for a faculty member. Research Accounts allow access via web, SSH, and/or FTP, and include 750 MB of home/projects storage. Research assistants will have their own password access; this password is to remain confidential and is not to be shared with any other individual.

Class: The WRDS administrator and faculty may request class accounts for students who need to access the WRDS web interface. These accounts are primarily for student usage that is associated with a specific class at the Johns Hopkins University. Up to 10 simultaneous users will share the same account and password. These accounts provide access only and do NOT include storage. They expire at the end of the term. This password is not to be shared with any other individual.

1.4 WRDS Terms of Use

- **Your use of the WRDS services is for academic and non-commercial research purposes only.** Your use of the WRDS services is governed by and restricted under the Subscription Agreement between the Johns Hopkins University (the “Subscriber”) and Wharton Research Data Services. You may not use data downloaded from the WRDS database for any non-academic or commercial endeavor.
- **The Subscription Agreement between the subscriber and the Wharton Research Data Services governs your access to the WRDS database.** Individual WRDS accounts are offered to current, full-time faculty; full-time research staff; and students engaged in business and economics research at the Johns Hopkins University. Access and individual accounts for research assistants, visiting scholars and other non-permanent faculty are offered at the university’s and Wharton Research Data Service’s discretion.
- **You must protect the confidentiality of your WRDS username and password.** You may not reveal, disclose, transfer or share your username and password with anyone, including without limitation a co-author or other collaborator.
- **You must notify Wharton Research Data Services within thirty (30) days of any changes in your affiliation with the Subscriber institution,** including without limitation if you leave your current university or institution or change your affiliation in any manner. **IF YOU ARE NO LONGER EMPLOYED AT A UNIVERSITY OR INSTITUTION THAT SUBSCRIBES TO WRDS, YOU MAY NOT ACCESS OR USE THE WRDS SERVICES.** If your new university or institution is a then-current WRDS subscriber, Wharton Research Data Services will transfer your account and files to your new university’s or institution’s account. Your use and access to the WRDS services will then be subject to these Terms of Use and the Subscription Agreement between your new university or institution and Wharton Research Data Services. If your new university of institution is not a then-current WRDS subscriber, then you may not access or use the WRDS services.
- **Your university or institution may place additional restrictions on your use of and access to the WRDS services.** You must learn about and honor restrictions your university or institution may place on users of the WRDS services and any use of the licensed data that is accessed through the WRDS services.
- **Your right to access and/or use the WRDS services is subject to immediate suspension if there is any evidence of the misuse of your WRDS services account or username or password.**

- **To the extent there is any conflict between these Terms of Use and the Subscription Agreement governing your access and use of the WRDS services, the terms of the Subscription Agreement shall govern.**

1.5 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 that currently are available to the Johns Hopkins University through WRDS. Access depends on the university’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.

Center for Research in Security Prices© (CRSP):

NYSE/AMEX/NASDAQ Stocks (Monthly, Daily)

Global Insight :

DRI Basic Economics
DRI International

NYSE Trade and Quote (TAQ):

Intraday transactions data (trade and quotes) for NYSE/AMEX/NMS and small cap issues

Standard and Poor’s ExecuComp:

Executive compensation data

Standard and Poor’s Compustat:

The **Full Compustat Subscription** includes data on over 24,000 active and inactive companies.

The data history includes:

Annual data since 1950;

Quarterly data since 1962;

Segment data since 1984;

Monthly Stock Price and Dividend History since 1962 ;

Bank Annual and Quarterly Files (current or latest 20 years of Annual data, latest 12 years of Quarterly data)

The **Compustat (Global)** international database includes data over 22,000 active and inactive companies, since 1993 where available.

Access to the following databases is *free* for all subscribers. View My WRDS for a full list of additional “subscribed” resources that are available to JHU.

- Bank Regulatory Database
- Fama-French (“Research”) Portfolios and Factors
- Federal Deposit Insurance Corporation (FDIC)
- Federal Reserve Bank Reports

- Foreign Exchange Rates
- SEC Disclosure of Order Execution

1.6 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 <http://wrds.wharton.upenn.edu/news/index.shtml>.

1.7 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.

2. Contact Information

2.1 Vendor Technical Contact Information

For data-related technical support, please contact the data vendors that offer each set. Below are contacts and email addresses.

For subscriptions to databases through WRDS, please contact your WRDS Representative.

Vendor	Support Phone Number	E-mail
CRSP	(773) 834-1025	subscriptions@crsp.uchicago.edu
Global.Insight (Includes DRI)	(781) 301-9084	Sarika.pundit@globalinsight.com
NYSE TAQ		taqsupport@nyse.com
S&P Compustat	(800) 525-8640 x4458	clientsupport@standardandpoors.com

2.2 WRDS Representatives

Heather Tapager
 Research Services Librarian for Business
 The Milton S. Eisenhower Library
 3400 N. Charles Street
 Baltimore, MD 21218
 410-516-8778, htapager@jhu.edu

Back up: Lynne Stuart
 Economics Librarian
 410-516-8360
lstuart@jhu.edu

These are the responsibilities of your WRDS Representative:

1. Serve as a liaison between the WRDS staff and the users at the university.
2. Monitor account requests by verifying that a requestor is indeed a standing faculty, student, or an authorized researcher/ administrator at the university. Whenever a user from your institution submits an account request, we will send the administrator an e-mail notification. The administrator will go to the URL indicated in the message and follow the instructions to approve the request. After we receive 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.

2.3 WRDS Administration

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

3. Additional Help

3.1 Technical and Research Support

Our staff of technical and research specialists may be reached at wrd-support@wharton.upenn.edu. They are available to assist you with difficulties pertaining to database access, data queries, and programming in SAS 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.

3.4 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**.

3.5 Lost Output

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

4. WRDS@WHARTON

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 for a quicker response. This is helpful for detecting any errors in your program.

We hope you enjoy your new WRDS accounts. We are confident that you will find the ease of access, abundance of data, and unique system features such as downloading your information to an MS Excel spreadsheet, Advanced Query capabilities, and e-mail notification feature a significant benefit to your research and teaching endeavors.