

Chapter Eleven

Development Tools

Toad

Buttons and Menus

In SQL Style Window and Schema Browser Window



Editor (new SQL style window)
From menu, select Database, Editor



Schema Browser
From menu, select Database, Schema Browser



Commit database change
From menu, select Session, Commit



Rollback database change
From menu, select Session, Rollback



New Connection (provides dropdown of choices)
From menu, select Session, New Connection

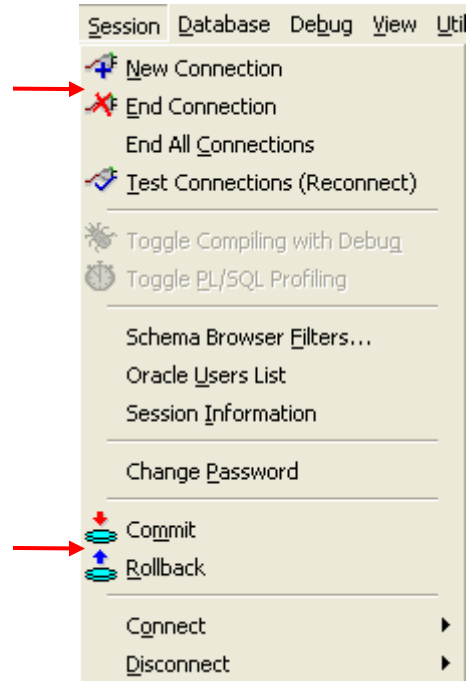
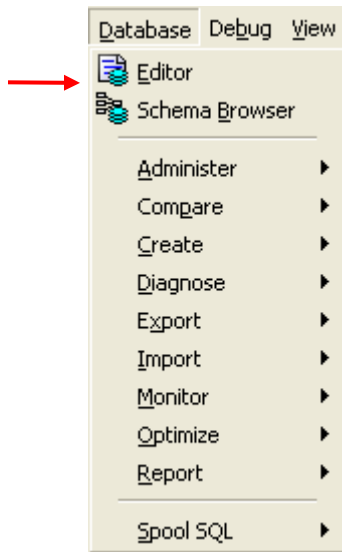


End Connection (provides dropdown of current connections)
From menu, select Session, End Connection



Save Desktop
You can save different configurations of the desktop. In addition, you can 'Revert to Last Saved Desktop' or 'Restore Default Desktop'.





In SQL Style Window



Execute Statement

If your SQL window only has one statement in it, then you can use this button. If you have more than one statement then you can highlight the SQL statement and use this button. If you separate each statement with a semicolon then this button will execute the statement where the cursor is located.



Execute snippet at cursor (Ctrl + Enter)

If your SQL window has multiple statements, then you can place your cursor somewhere in one of the statement and use this button to execute just that SQL statement. There is no need to highlight the statement.



Execute as Script (Execute in QSR, Execute in SQL*Plus)

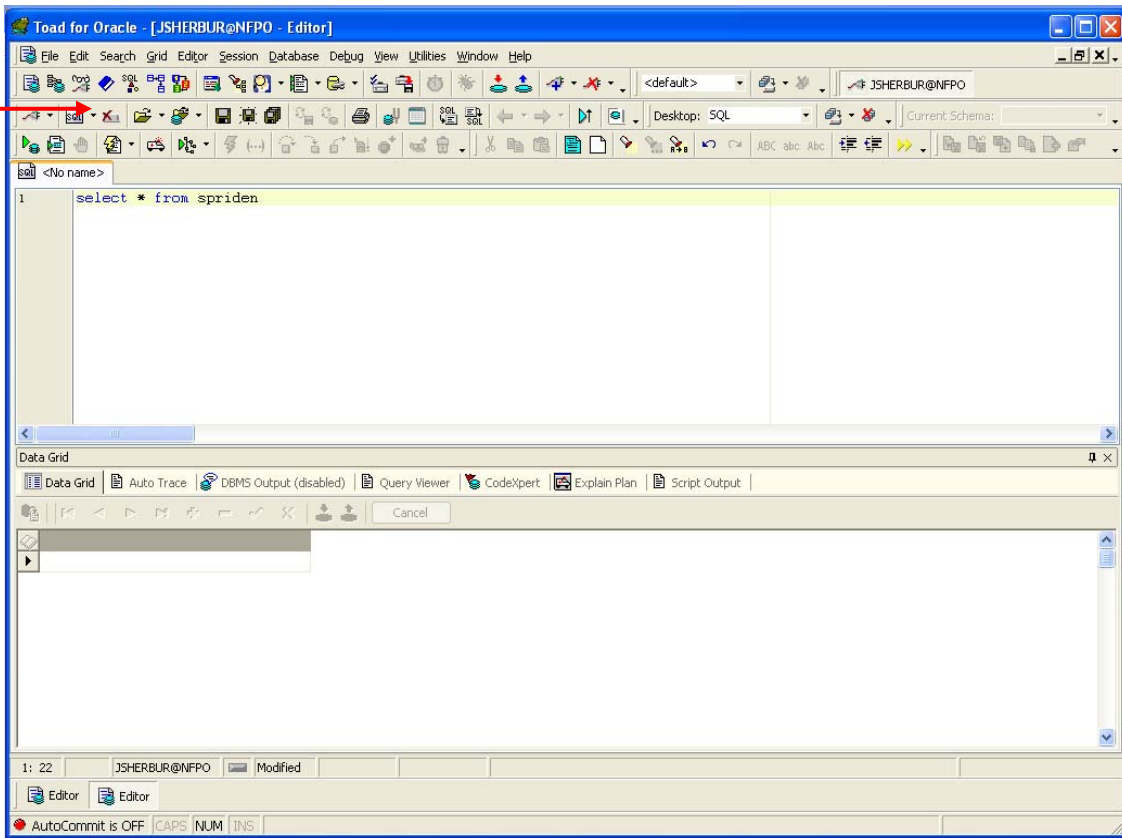
You can use this button to execute an SQL as a script. For example, you may have an anonymous block that you need to execute.



Recall previously used SQL statement

This button will bring up a window that shows previously executed SQL statements. You can then sort and search for particular ones.





Parts of the SQL Window

Data Grid

The Data Grid displays the results of the query.

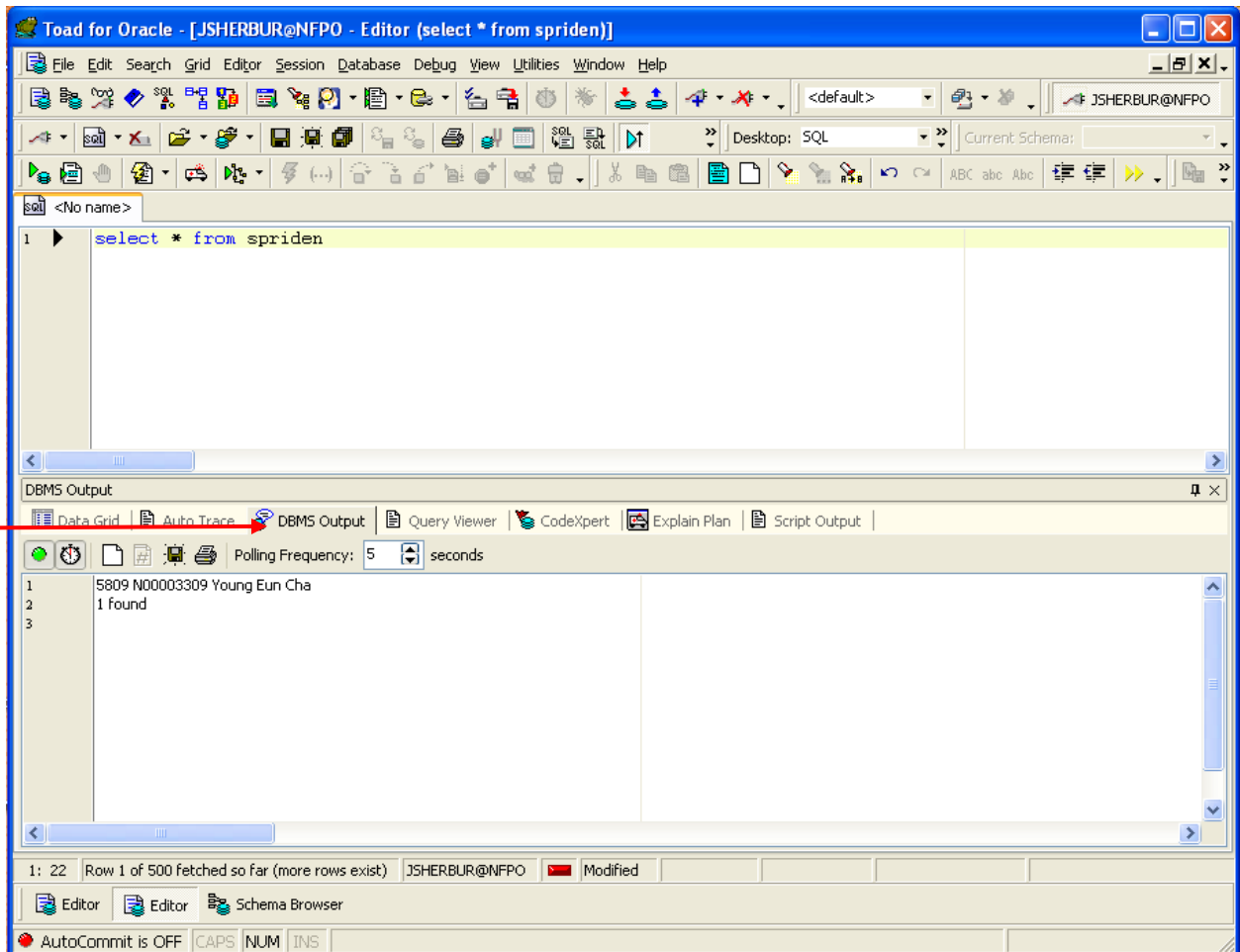
The screenshot shows the Toad for Oracle interface. The main editor window contains the SQL query: `select * from spriden`. Below the editor, the Data Grid displays the results of the query. A red arrow points to the 'Data Grid' tab in the toolbar.

SPRIDEN_PIDM	SPRIDEN_ID	SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SPRIDEN_CHANGE_IND	SPRIDEN_ENTITY_IND	SPRIDEN_AC
5280	N00002780	Kirby	Monica	Odette		P	10/12/2002
5281	N00002781	Robbins	Patricia	A		P	12/26/2004
5282	N00002782	Okren	Todd	R		P	10/12/2002
5283	N00002783	Swain	Joy	Simon		P	10/12/2002
5285	N00002785	Ledman	Everett	Dale		P	12/26/2004
5286	N00002786	D'Zamko	Mary	E		P	5/21/1999
5287	N00002787	Pender	Betsey	Ludington		P	5/2/2003
5289	N00002789	Brock	Kathy	Leverne		P	5/21/1999

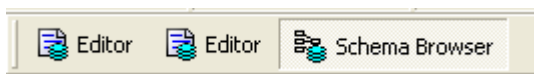
At the bottom of the interface, the status bar shows: 1: 22 Row 1 of 500 fetched so far (more rows exist) JSHERBUR@NFPO Modified. The AutoCommit is OFF, and keyboard shortcuts for CAPS, NUM, and INS are visible.

DBMS Output

The DBMS Output show output from DBMS statements procedures, functions or anonymous blocks.

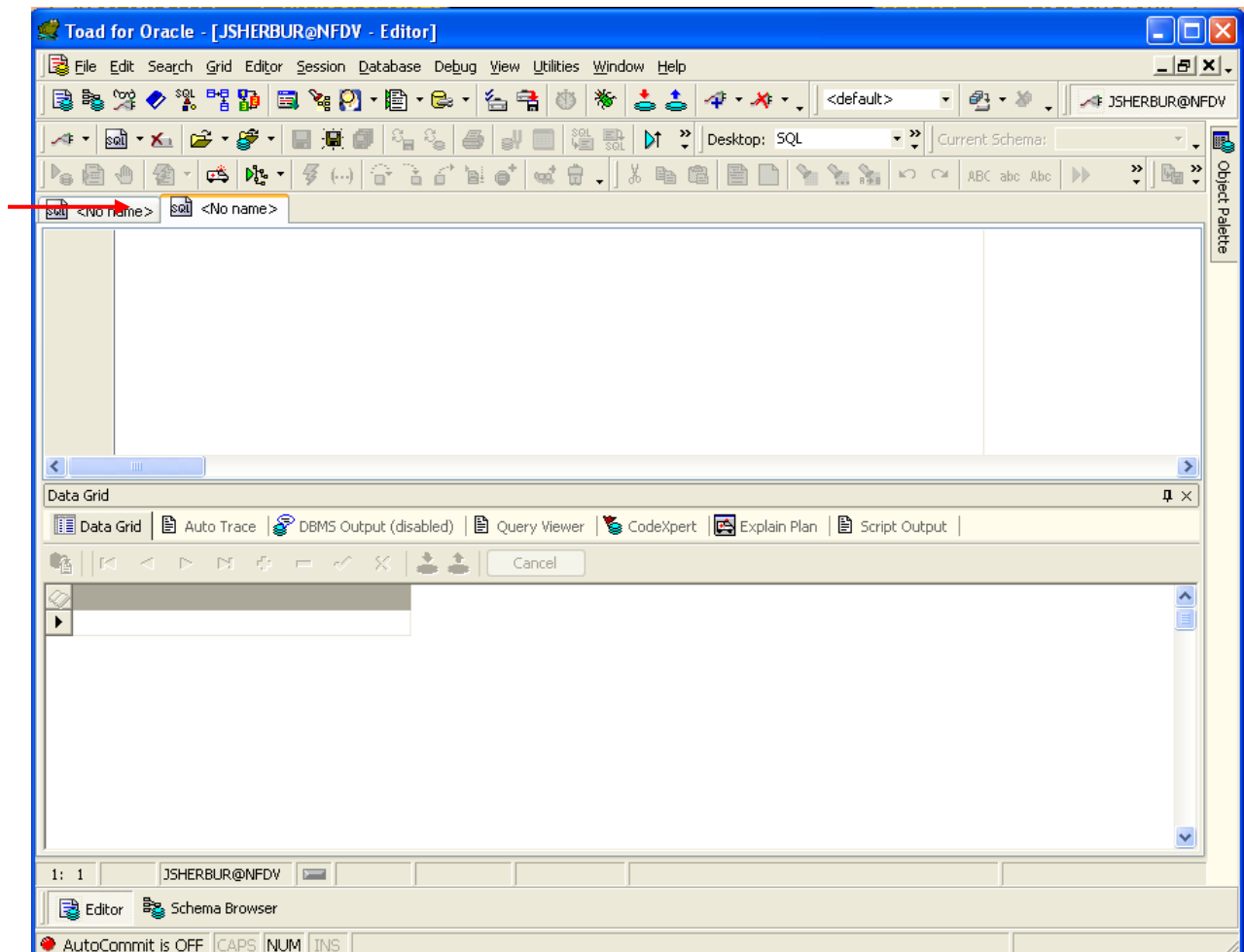
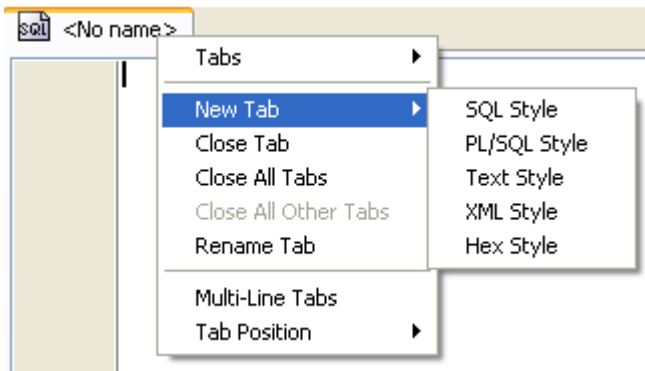


You can have multiple windows open during a session. These windows are displayed at the bottom of the window. You can move from window to window by clicking on one of these icons.



Multiple tabs in an SQL style window

You can right mouse on a tab to create another window. You can click on the tabs to switch from one to another.



Object Palette

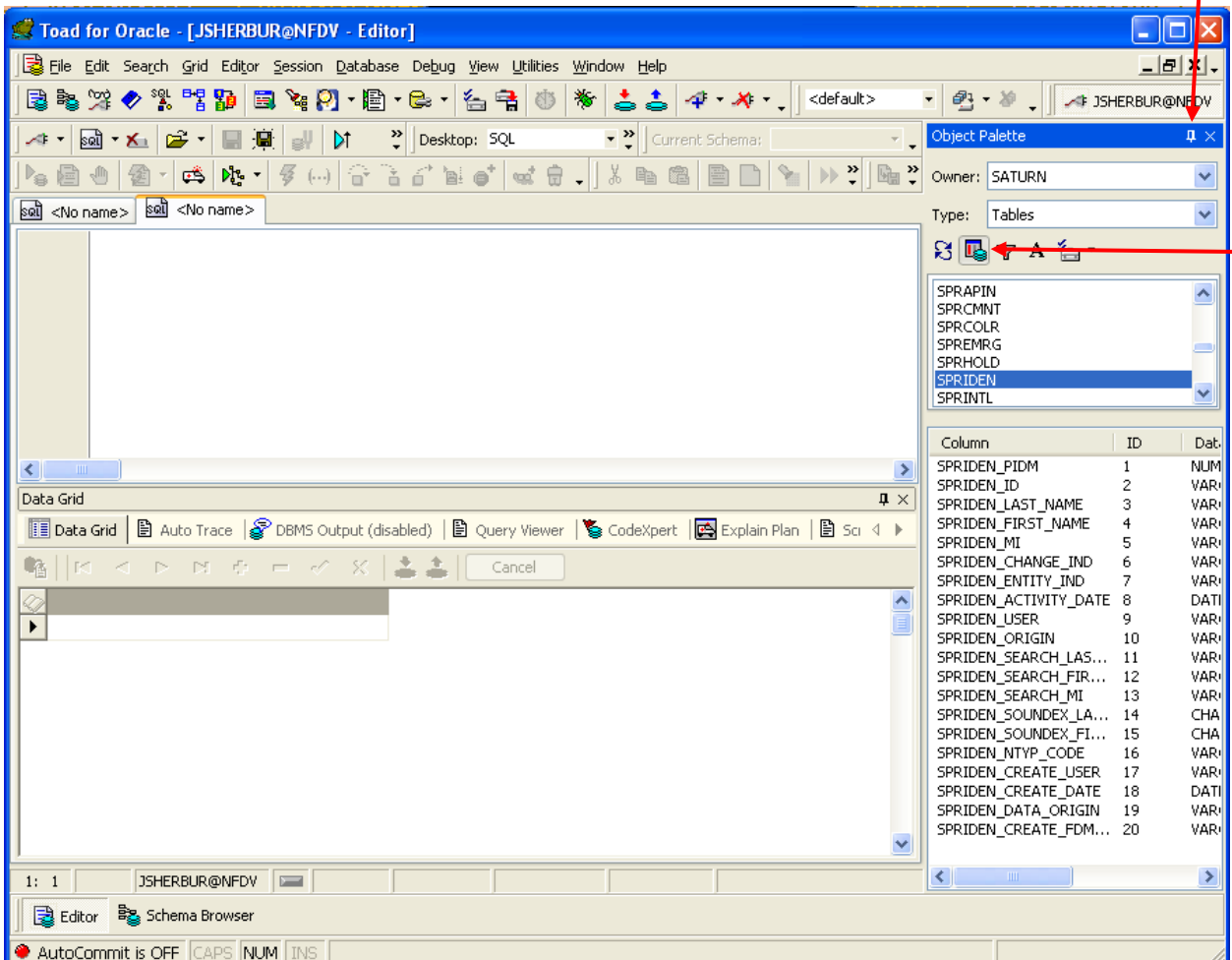
From the view menu, you can select the Object Palette. This will show you a list of tables and columns in the selected schema. This allows you to double click or drag and drop table or columns and insert them into your query. You can select

multiple columns at a time and drag them to the query area. If multiple columns are selected, a comma will automatically be inserted after each one. This is not the case if you select one column at a time. Many of the windows have the feature to either close them or use the 'thumb tack' to hide them until you cursor over them. When you cursor over the window, it will reappear.



Show Columns

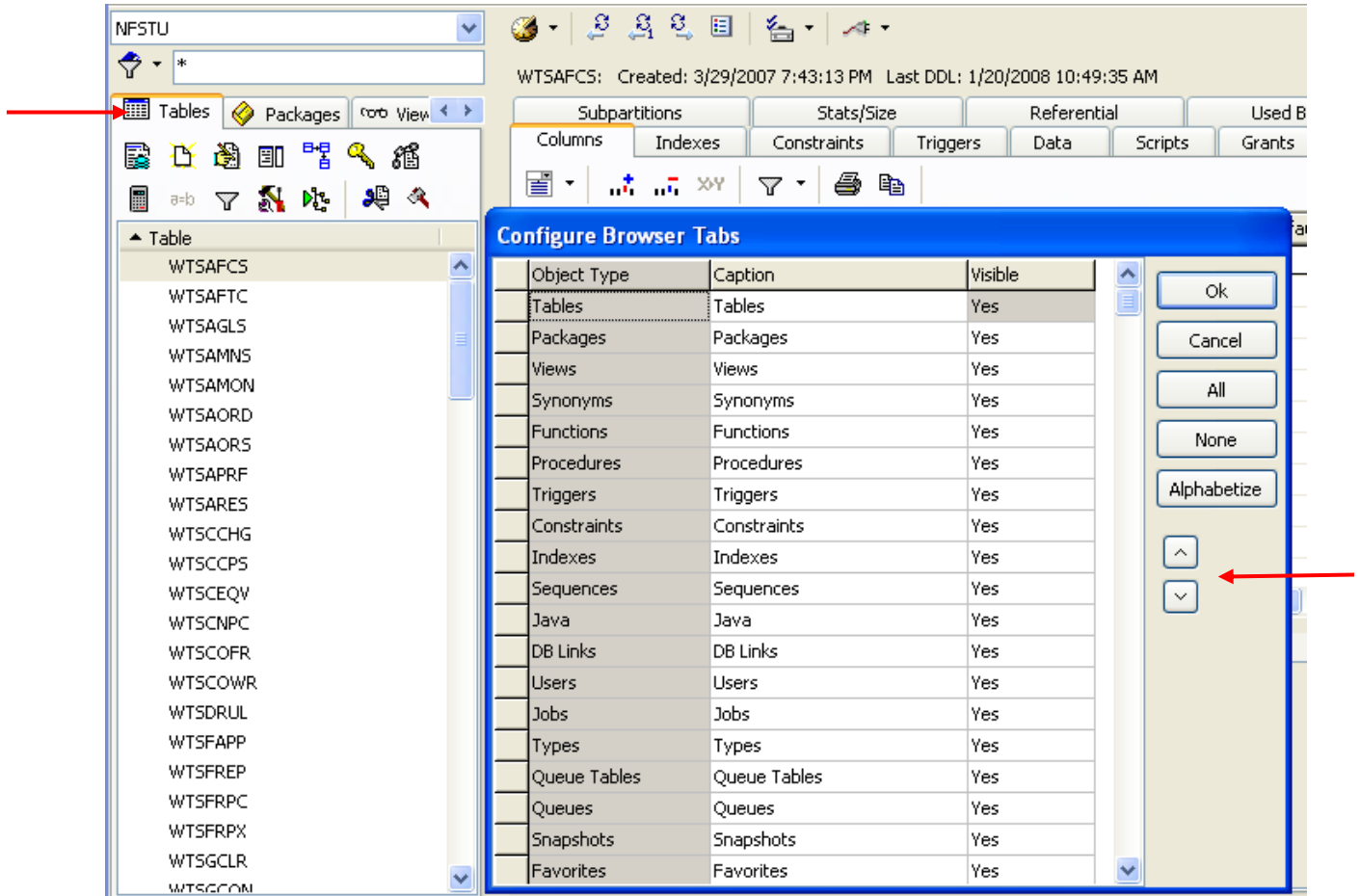
This icon allows you to show or hide the columns.



Parts of the Schema Browser

Browser Tabs

You can customize the browser tabs. You can right mouse click in the tab area and select “Configure”. The “Configure Browser Tabs” window is displayed. You can move more frequently used tabs to show up as the leftmost tabs so they are visible in the window without scrolling. Simply select the up and down arrows in the “Configure Browser Tabs” to position them.



Tables Tab
Columns Tab

On the Columns Tab, you can choose to “Show No Comments”, “Show Table Comments” (as this example is), or “Show Column Comments”.

The screenshot displays the Oracle SQL Developer interface for the Columns tab of a table. The top navigation bar includes tabs for Subpartitions, Stats/Size, Referential, Used By, and Auditing. Below this, a secondary navigation bar shows Columns (selected), Indexes, Constraints, Triggers, Data, Scripts, Grants, Synonyms, and Partitions. A toolbar with various icons is located below the navigation bars. The main area contains a table with columns: ID, Pk, Null?, Data Type, Default, and Comments. The table lists 11 columns with their respective data types and nullability. A dropdown menu is open over the table, showing options: Show No Comments, Show Table Comments (selected), and Show Column Comments. Below the table, there is a checkbox labeled "Editable Table Comments" which is unchecked. A red arrow points to the text "FTIC Profile data and high school" located in the area below the checkbox.

ID	Pk	Null?	Data Type	Default	Comments
1		Y	NUMBER (2)		Week of year for re
2		Y	DATE		Actual date of repo
WTSAFCS_TERM	3	Y	VARCHAR2 (6 Byte)		Term Code.
WTSAFCS_STYP_CODE	4	Y	VARCHAR2 (1 Byte)		Type of Student.
WTSAFCS_STYP_DESC	5	Y	VARCHAR2 (30 Byte)		Type of Student de
WTSAFCS_PRIOR_GROUP	6	Y	VARCHAR2 (30 Byte)		Group name from pr
WTSAFCS_APDC_CODE	7	Y	VARCHAR2 (3 Byte)		Decision code.
WTSAFCS_APDC_DESC	8	Y	VARCHAR2 (10 Byte)		Decision code descr
WTSAFCS_PRIOR_APDC_GROUP	9	Y	VARCHAR2 (10 Byte)		Decision Description
WTSAFCS_ADMT_CODE	10	Y	VARCHAR2 (2 Byte)		Admit Type - not stu
WTSAFCS_HS_SBG_CODE	11	Y	VARCHAR2 (6 Byte)		High school of Stud

Editable Table Comments
FTIC Profile data and high school

Columns Tab (continued)

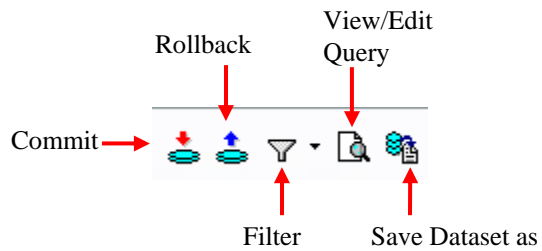
The Columns Tab also displays the column name, ID, primary key, nullable, data type, default values, and comments. The Comments field is not always present. You must right mouse on the field name (column name, ID, etc.) then select “Show column comments in list”.

Column Name	ID	Pk	Null?	Data Type	Default	Comments
WTSAFCS_WEEK	1		Y	NUMBER (2)		Week of year for re
WTSAFCS_WEEK_DATE	2		Y	DATE		Actual date of repor
WTSAFCS_TERM	3		Y	VARCHAR2 (6 Byte)		Term Code.
WTSAFCS_STYP_CODE	4		Y	VARCHAR2 (1 Byte)		Type of Student.
WTSAFCS_STYP_DESC	5		Y	VARCHAR2 (30 Byte)		Type of Student de:
WTSAFCS_PRIOR_GROUP	6		Y	VARCHAR2 (30 Byte)		Group name from pr
WTSAFCS_APDC_CODE	7		Y	VARCHAR2 (3 Byte)		Decision code.
WTSAFCS_APDC_DESC	8		Y	VARCHAR2 (10 Byte)		Decision code descr
WTSAFCS_PRIOR_APDC_GROUP	9		Y	VARCHAR2 (10 Byte)		Decision Description
WTSAFCS_ADMT_CODE	10		Y	VARCHAR2 (2 Byte)		Admit Type - not stu
WTSAFCS_HS_SBG_CODE	11		Y	VARCHAR2 (6 Byte)		High school of Stud

Editable Table Comments

FTIC Profile data and high school

Data Tab



The Commit icon will save any changes to the data to the database.

The Rollback icon will rollback any changes to the data setting it back to its original state prior to any changes.

The Filter icon allows you to include or exclude certain records by using the columns to narrow the data that is displayed.

The View/Edit Query icon allows you to manually change the query that is producing the data in the grid.

The Save Dataset as icon allows you to save the data in the grid to a file.

Packages Tab



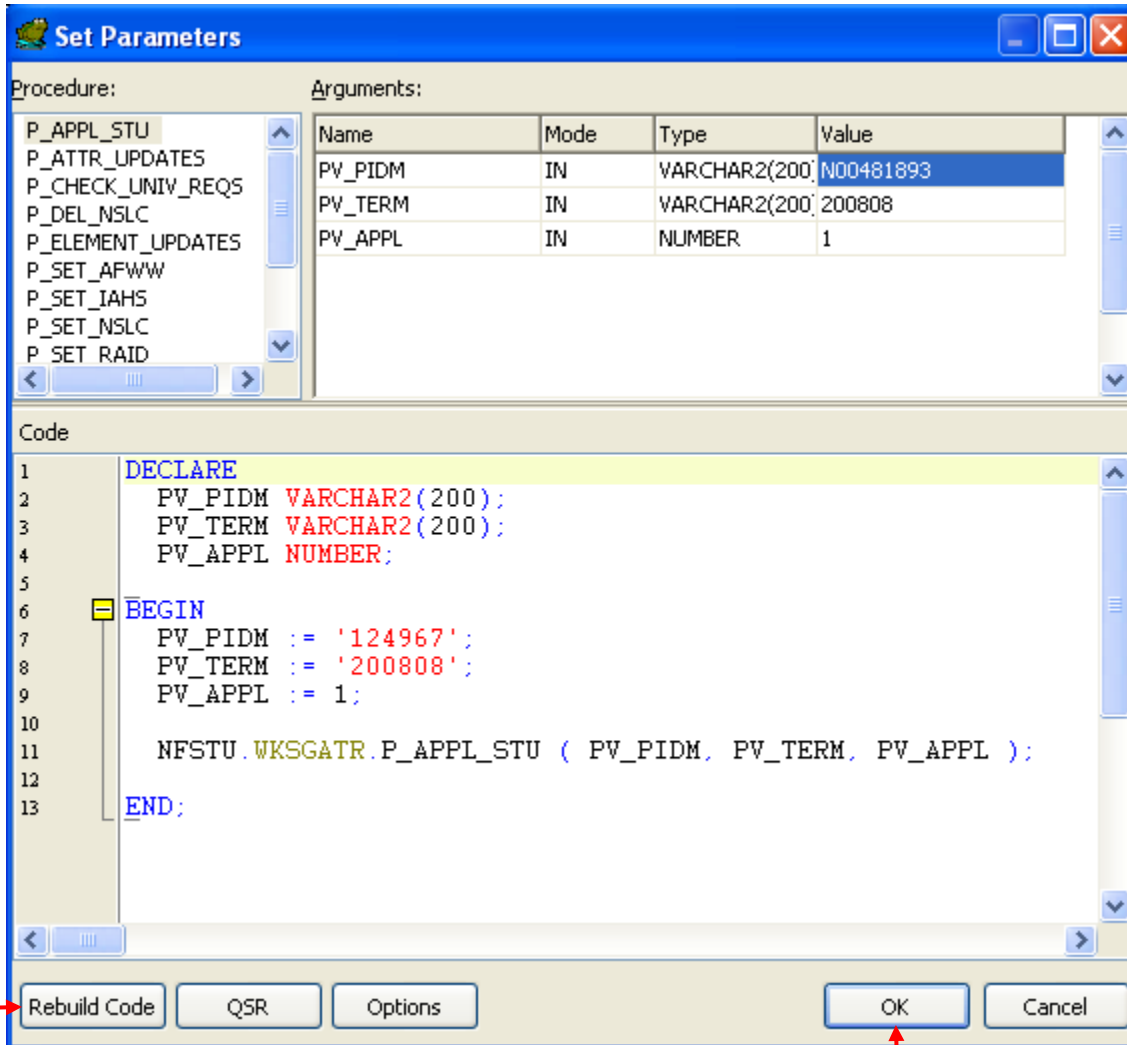
Execute Procedure

This icon allows you to execute a function or procedure in the highlighted package. Only the procedures and functions that are exposed in the specification are available to execute.

The screenshot displays the Toad for Oracle interface. On the left, the Schema Browser shows the 'NFSTU' schema with a list of packages. The 'WKSGATR' package is selected and highlighted in blue. A red arrow points to the lightning bolt icon in the toolbar above the package list. The main window shows the SQL Editor with the source code for the 'WKSGATR' package. The code includes a package specification and a procedure named 'p_del_class_attr'. The status bar at the bottom indicates 'AutoCommit is OFF' and shows the user 'JSHERBUR@NFPO'.

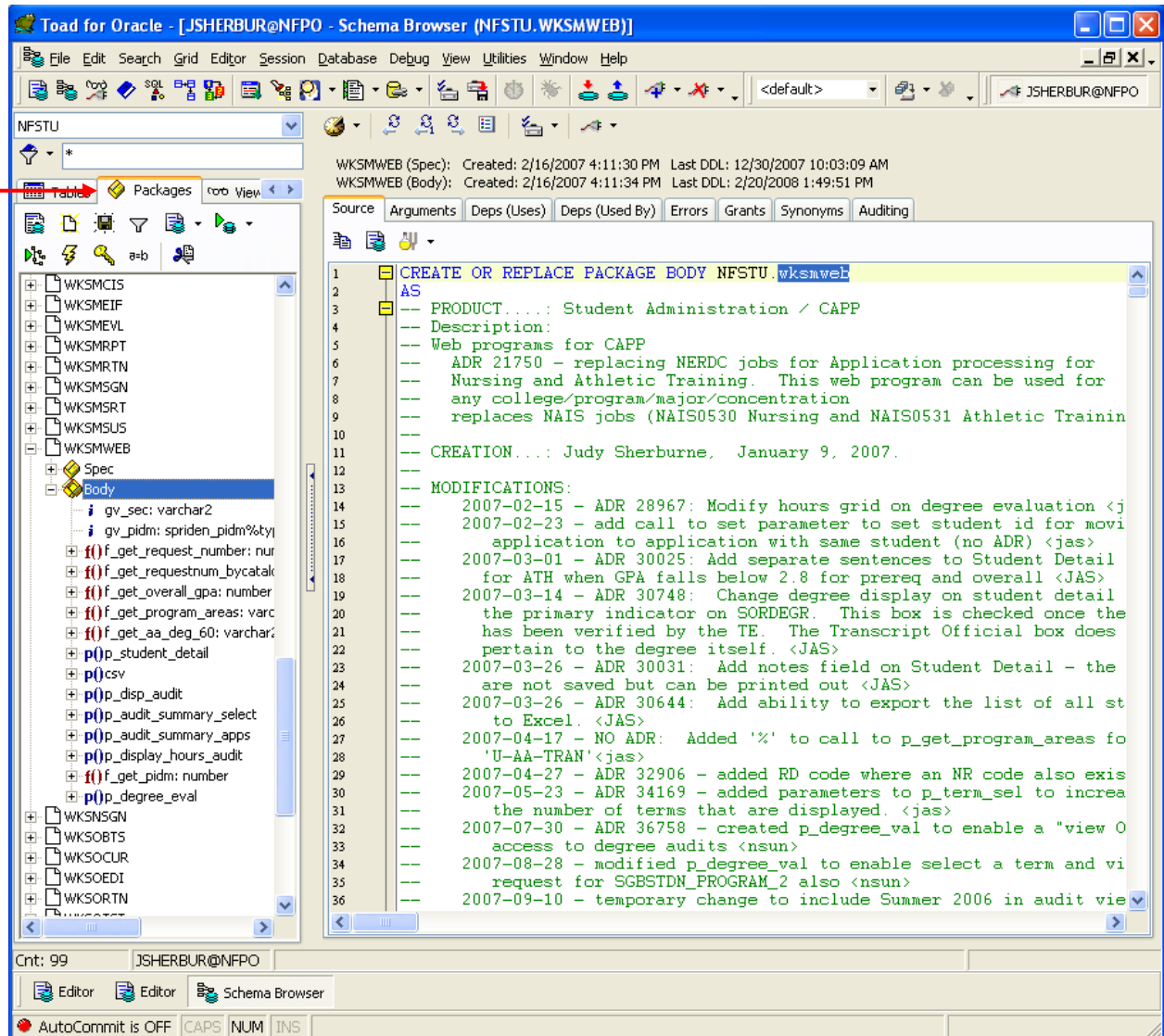
```
1 CREATE OR REPLACE PACKAGE BODY NFSTU.wksgatr
2 IS
3 -- FILE NAME...
4 -- PRODUCT...: Student
5 --
6 -- CREATION...: Keith Hufford, June 18, 2005.
7 -- MODIFICATIONS:
8 -- 2006-07-07 added check for gened catalog override and summer exempt
9 -- in p_check_univ_reqs <huff>.
10 -- 2006-09-08 changed check on shrtrtm in p_attr_update from
11 -- SHRTRTM_RECORD_STATUS_DATE to SHRTRTM_ACTIVITY_DATE <huf
12 -- 2006-11-24 ADR 22694: Add GenEd Satsified Override to SHANCRS <huff
13 -- 2007-01-25 ADR 27714 - Allow processing of applicants <huf>.
14 -- 2007-08-30 Added two new doctoral programs to class attr procedure
15 -- 2008-02-07 ADR: 50885 alter residency check for 25% rule <huff>.
16 -- 2008-02-24 ADR: 51006 add UGES,UGEX attributes <huff>.
17 -- Description:
18 -- student attribute maintenance processing
19 -----
20 -- delete attributes so we can get a fresh start
21 -----
22 PROCEDURE p_del_class_attr (pv_pidm IN NUMBER, pv_term IN VARCHAR2)
23 IS
24 lv_count NUMBER (3) := 0;
25 BEGIN
26 DELETE FROM sgrsatt
27 WHERE sgrsatt_pidm = pv_pidm
28 AND sgrsatt_term_code_eff = pv_term
29 AND sgrsatt_atts_code IN
30 ('AAOR', 'AASP', 'AADR', 'AFPP', 'ALGD', 'ALMM', '
31 'ATJR', 'RA30', 'RARS');
32
33 SELECT COUNT (*)
34 INTO lv_count
35 FROM sgrsatt
36 WHERE sgrsatt_pidm = pv_pidm AND sgrsatt_term_code_eff = pv_term
```

When you select the Execute Procedure icon you can then select which procedure you wish to execute (in the left side window) and provide the necessary parameters (in the right side window). Be sure to select the 'Rebuild Code' button before selecting the 'OK' button.



PL/SQL Style Window

You can open a PL/SQL window from the Schema Browser window. From the Packages tab, you can double click on a package which will open it in a PL/SQL window.



In the Navigator (left side), you can go directly to a function or procedure by clicking on it. The right side is where you edit the program.



Execute Statement

This icon is used to compile the package (even though it is called “Execute Statement”).



Format Code

This icon is used to format the code. You should use this frequently to keep your code readable. There is also a menu item to format the code: Edit, Format Code.

The screenshot displays the Toad for Oracle interface. The title bar reads "Toad for Oracle - [JSHERBUR@NFPO - Editor (WKSMWEB)]". The menu bar includes File, Edit, Search, Grid, Editor, Session, Database, Debug, View, Utilities, Window, and Help. The toolbar contains various icons for file operations, editing, and execution. A red arrow points to the "Execute Statement" icon (a green play button with a document) in the toolbar. The Navigator on the left shows a tree view of objects under "Statement/Object", with a red arrow pointing to a function named "f_get_requestnum_bycatai". The main editor displays the SQL code for the package body, including declarations, local subprograms, and a series of modification comments. The status bar at the bottom indicates "AutoCommit is OFF" and shows the current session as "JSHERBUR@NFPO".

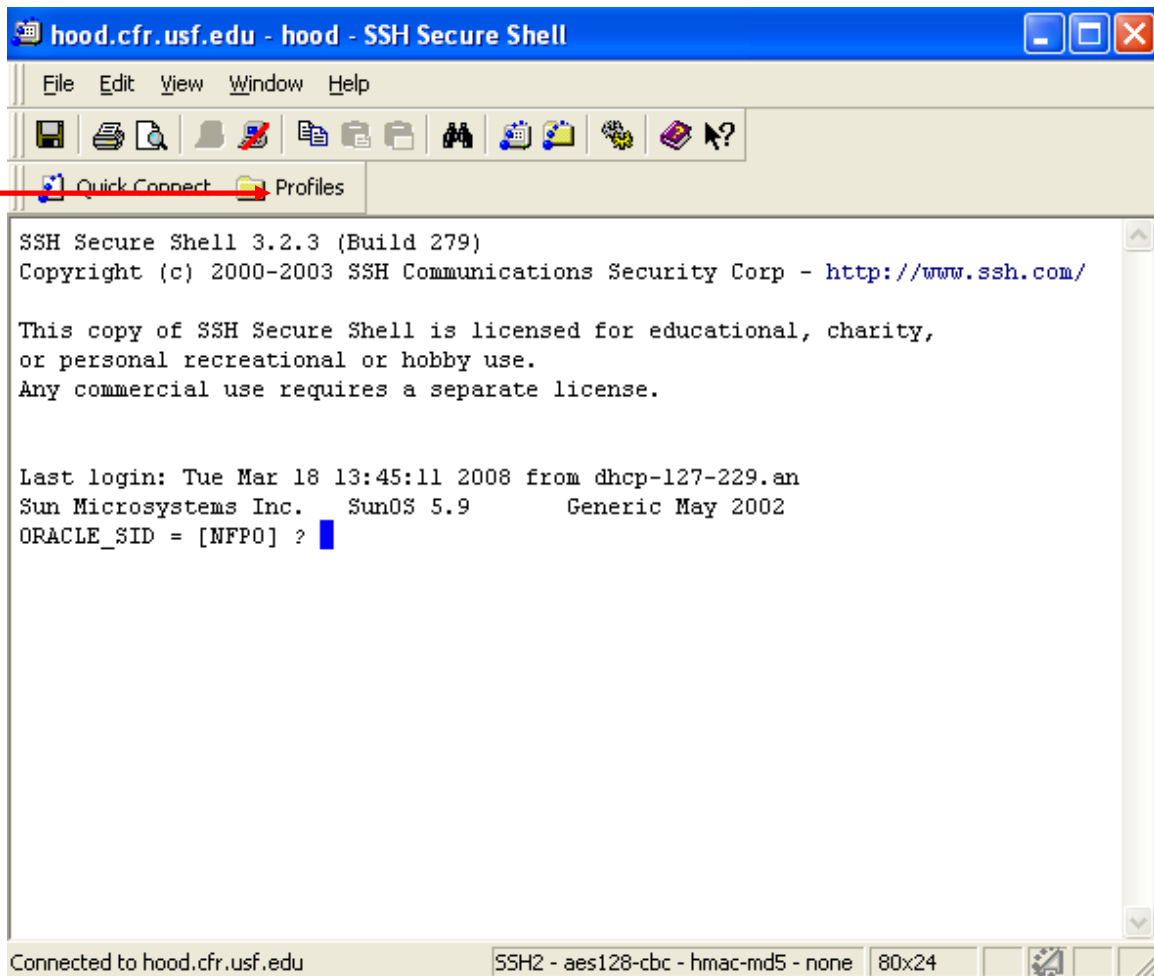
Secure Shell (SSH)

The SSH Secure Shell for Workstations Windows client (SSH2 client) is a program that allows secure network services over an insecure network.

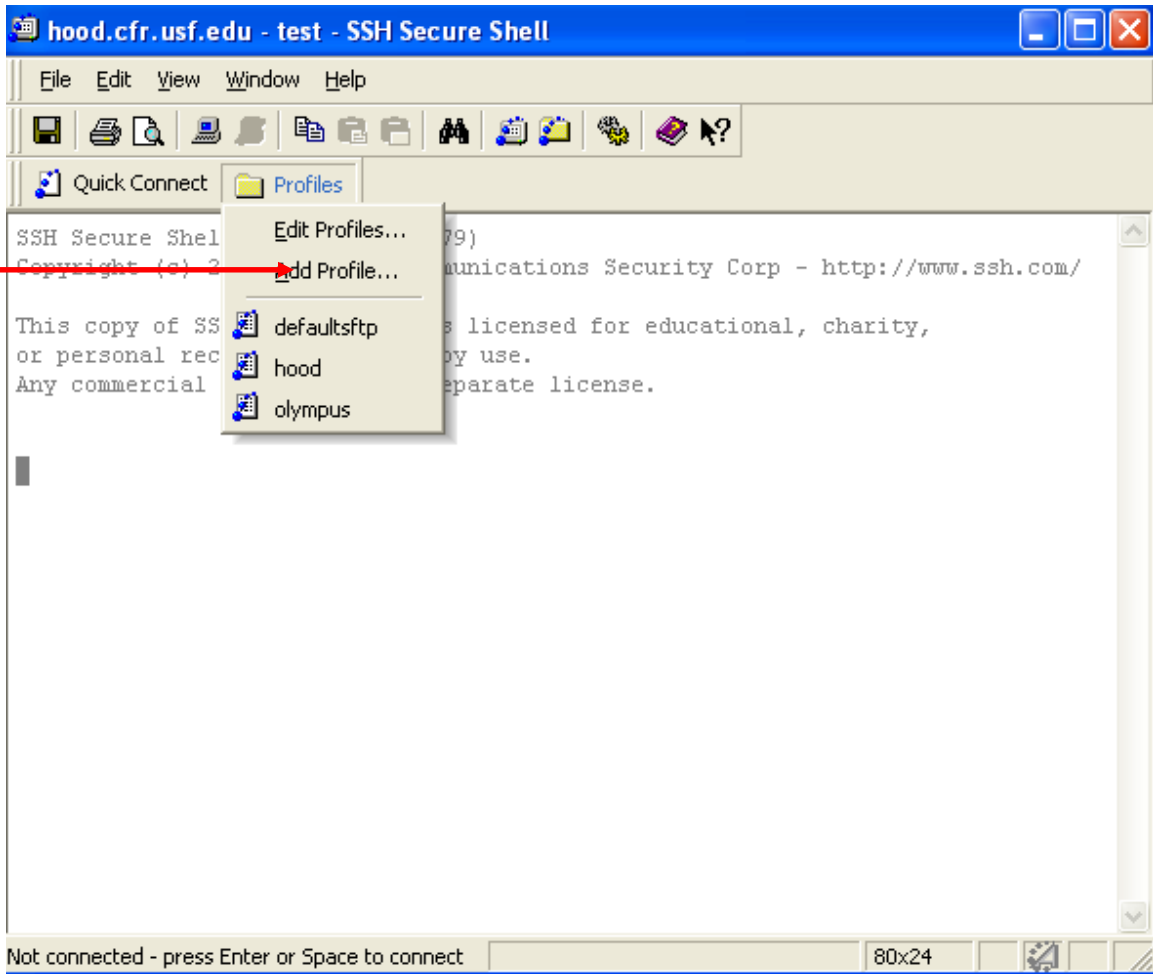
SSH Secure Shell for Workstations Windows Client replaces other, insecure terminal applications, such as Telnet and FTP. It allows you to securely login to remote host computers, to execute commands safely on a remote computer, and to provide secure encrypted and authenticated communications between two hosts in an untrusted network.

To set up a profile:

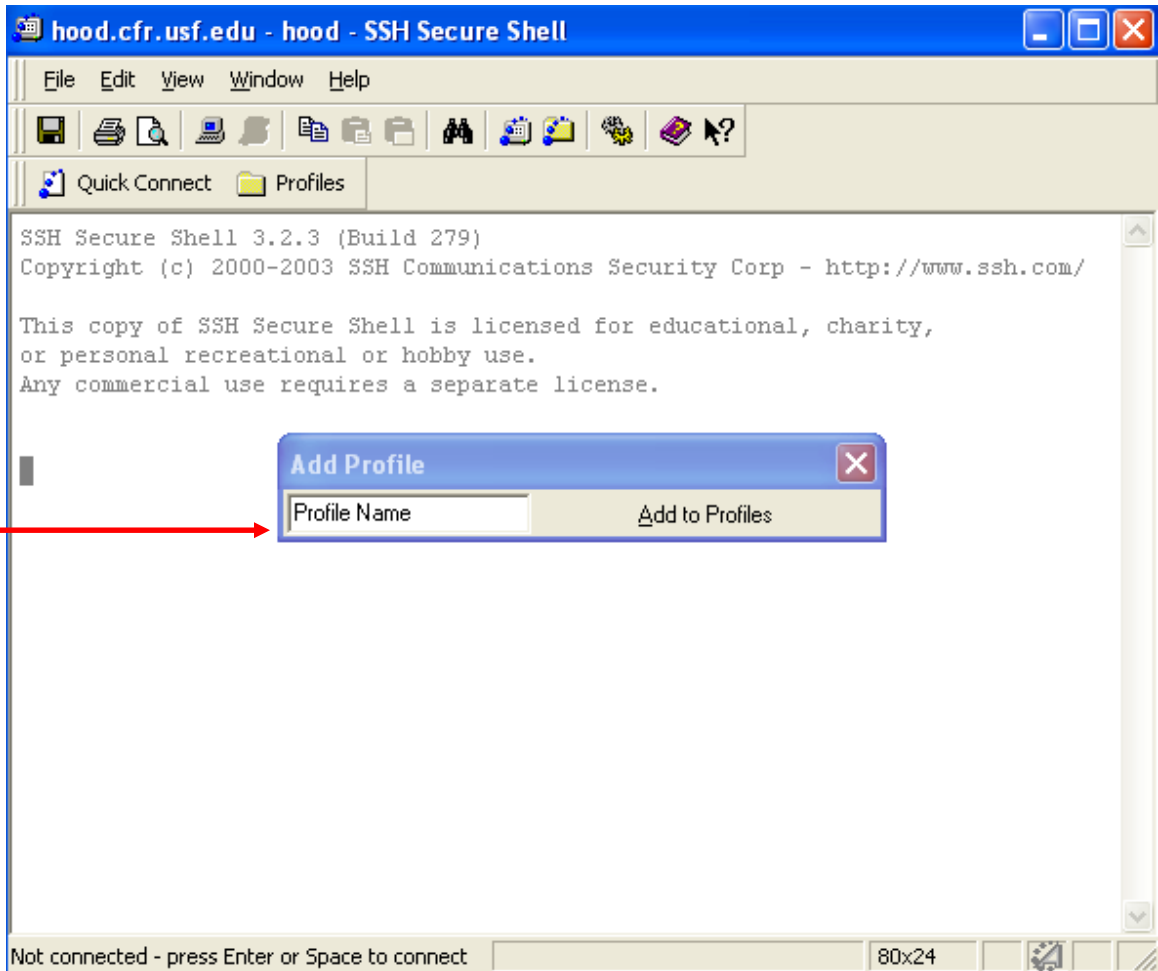
Click on Profiles



Click on ADD a profile:

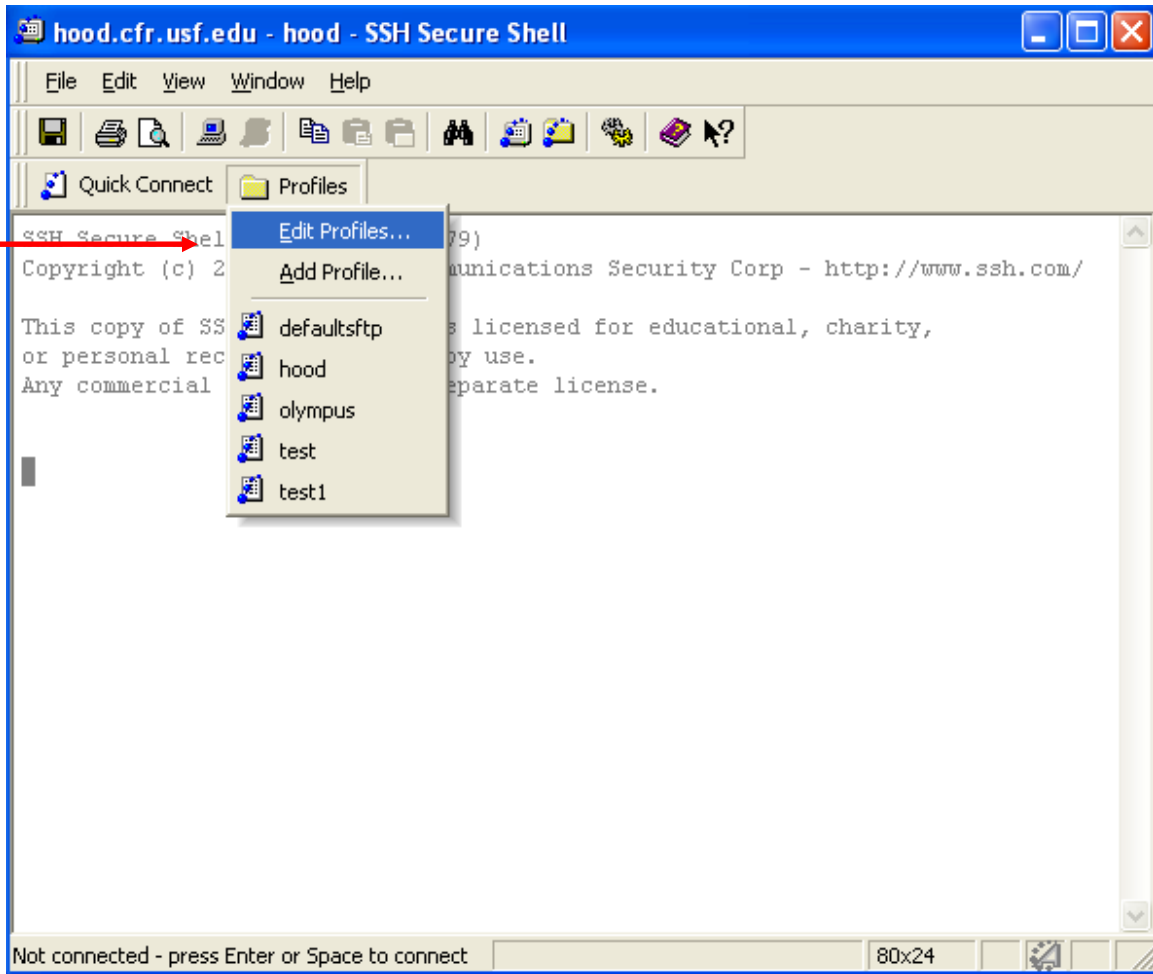


Add the name of your profile:



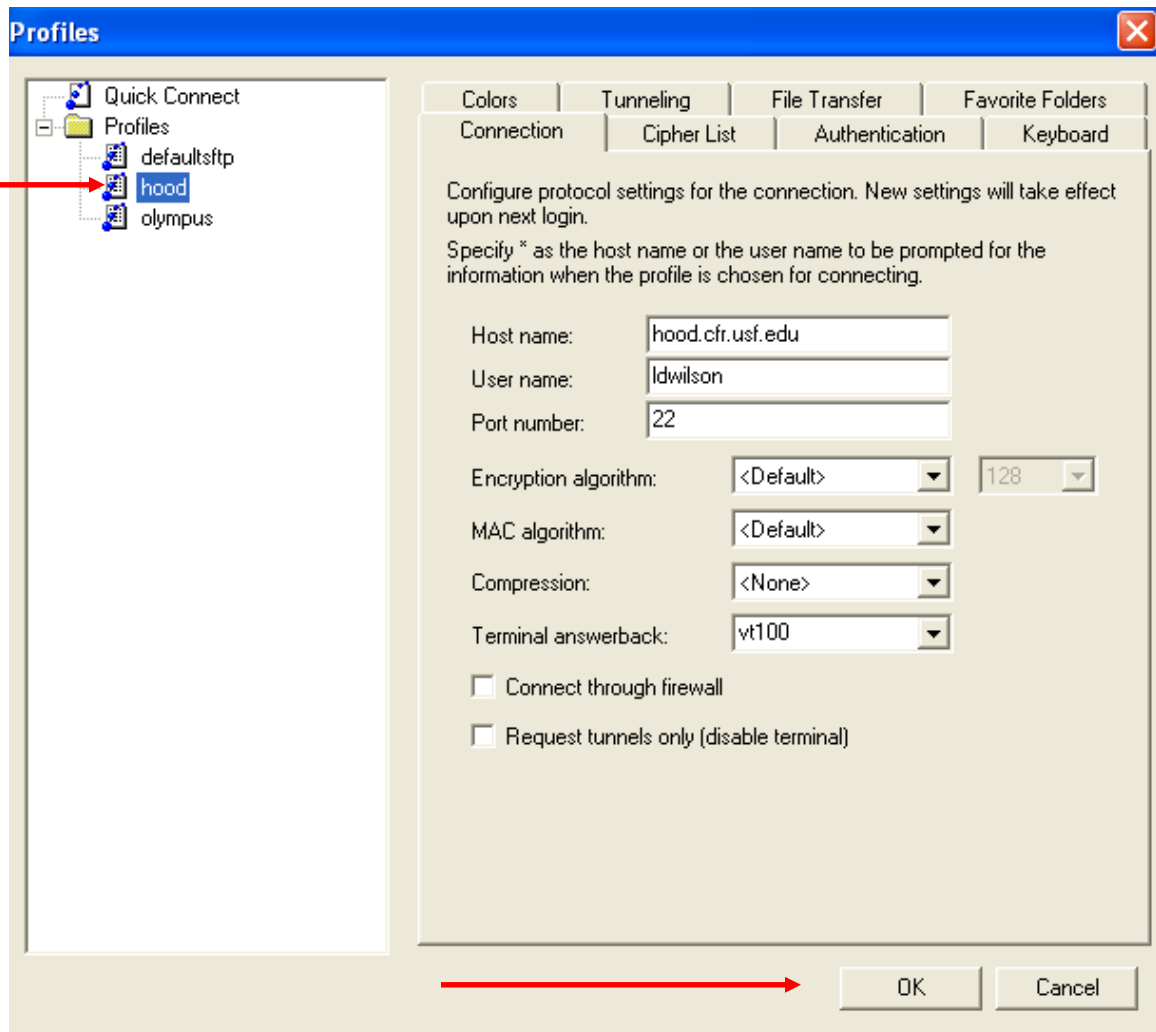
Then click Add to Profiles.

Then select Edit Profiles:



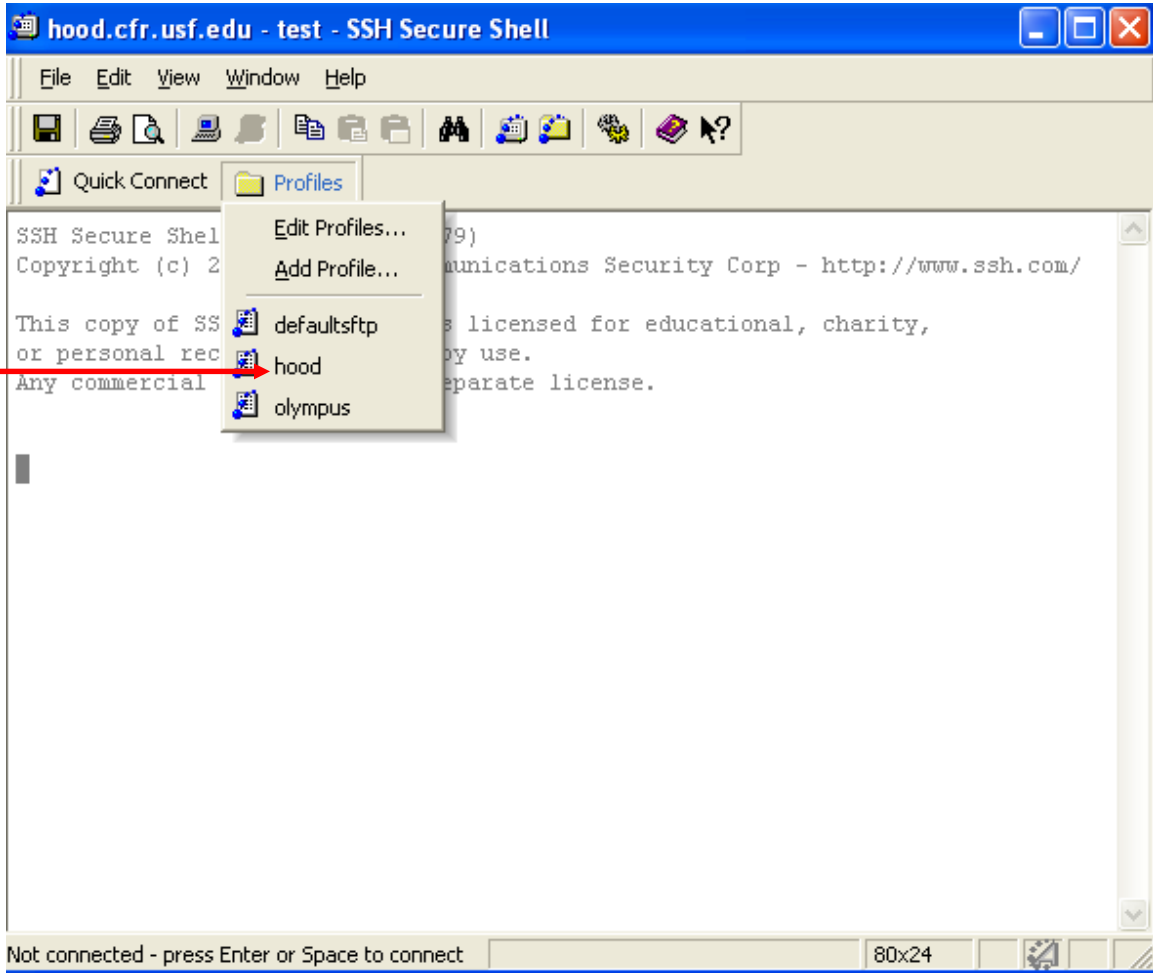
Highlight the profile you want to edit and

Add/change variables as needed:

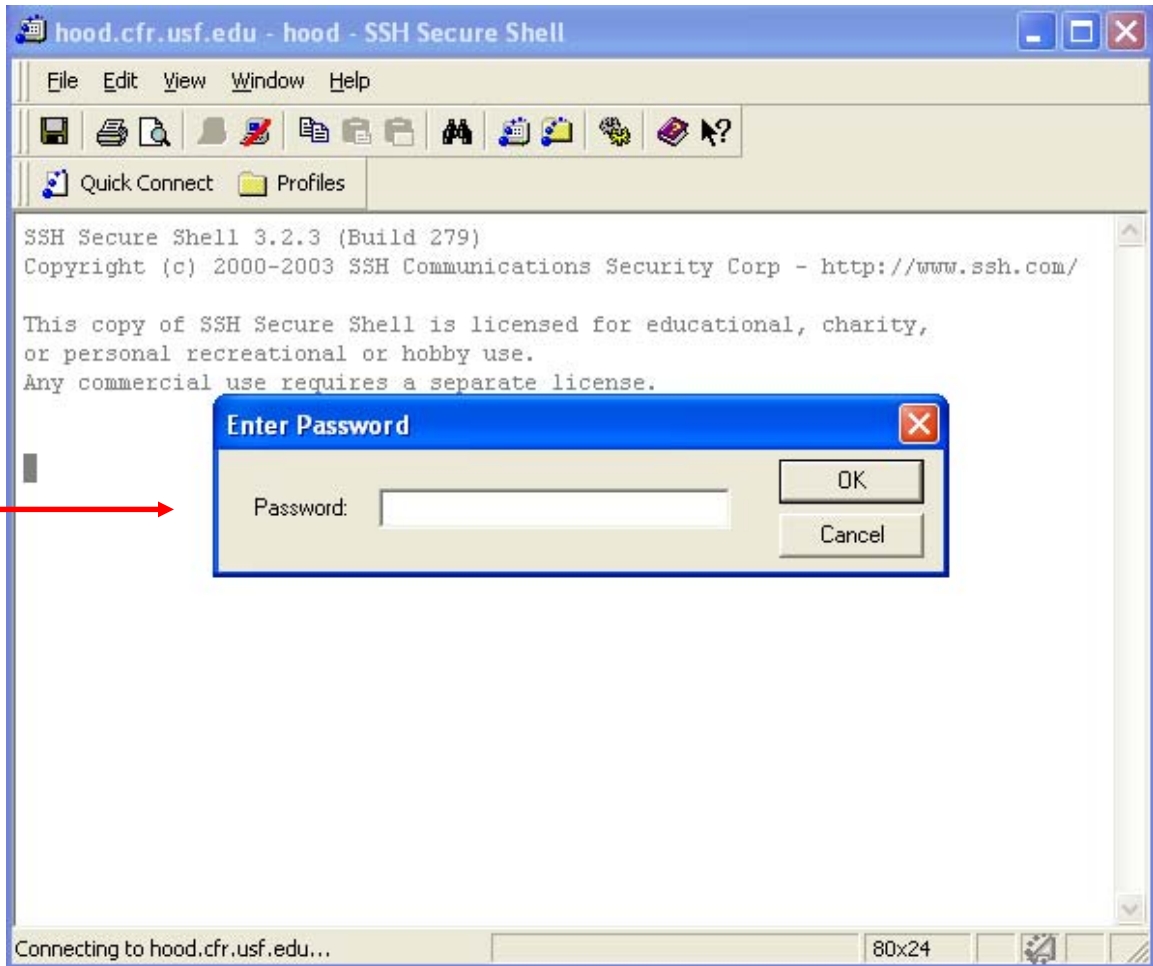


Click OK

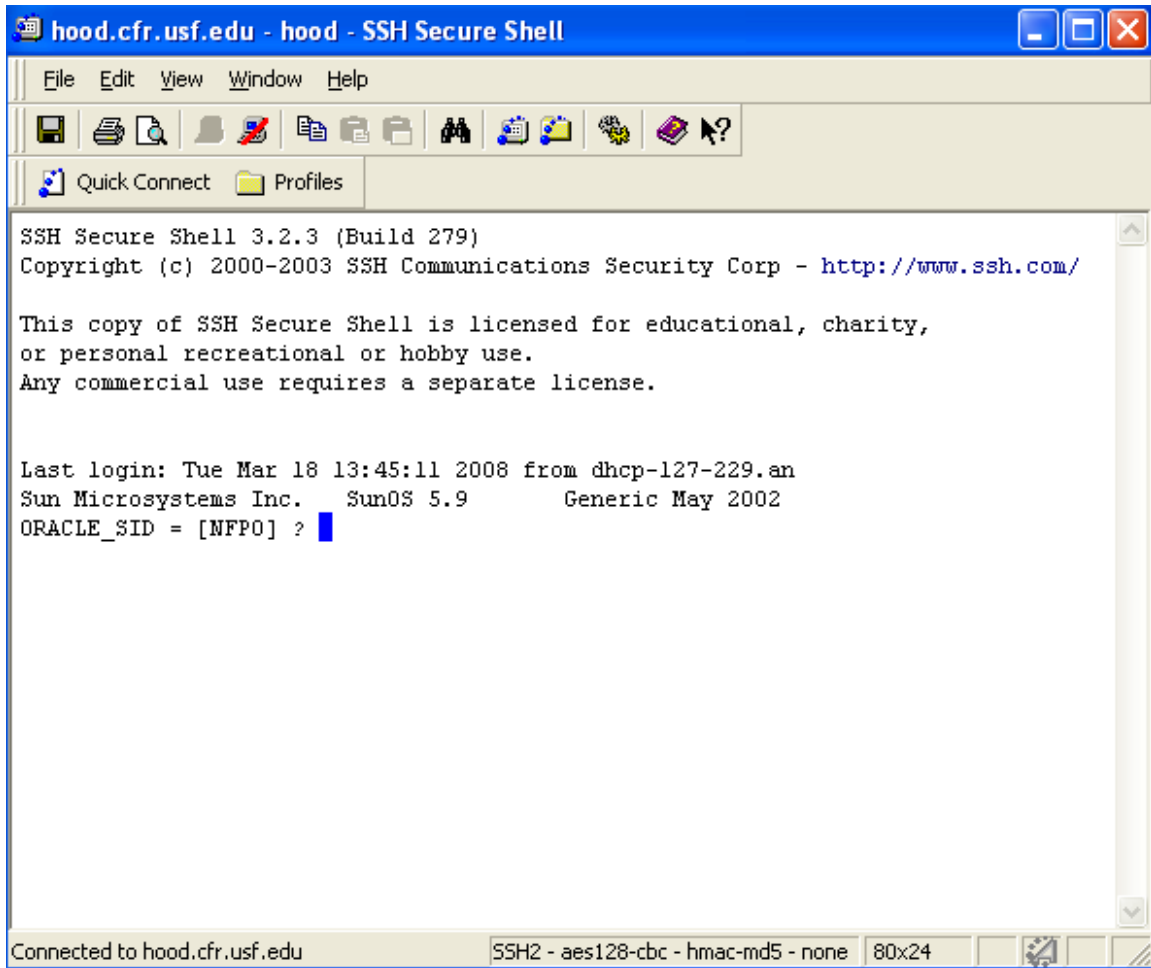
After profiles are set up and you are signed in you will then select and click on the profile you want to use:



Enter your password here:



After you have signed in you see this main page:



The screenshot shows a window titled "hood.cfr.usf.edu - hood - SSH Secure Shell". The window has a menu bar with "File", "Edit", "View", "Window", and "Help". Below the menu bar is a toolbar with various icons for file operations and system functions. The main area of the window displays the following text:

```
SSH Secure Shell 3.2.3 (Build 279)
Copyright (c) 2000-2003 SSH Communications Security Corp - http://www.ssh.com/

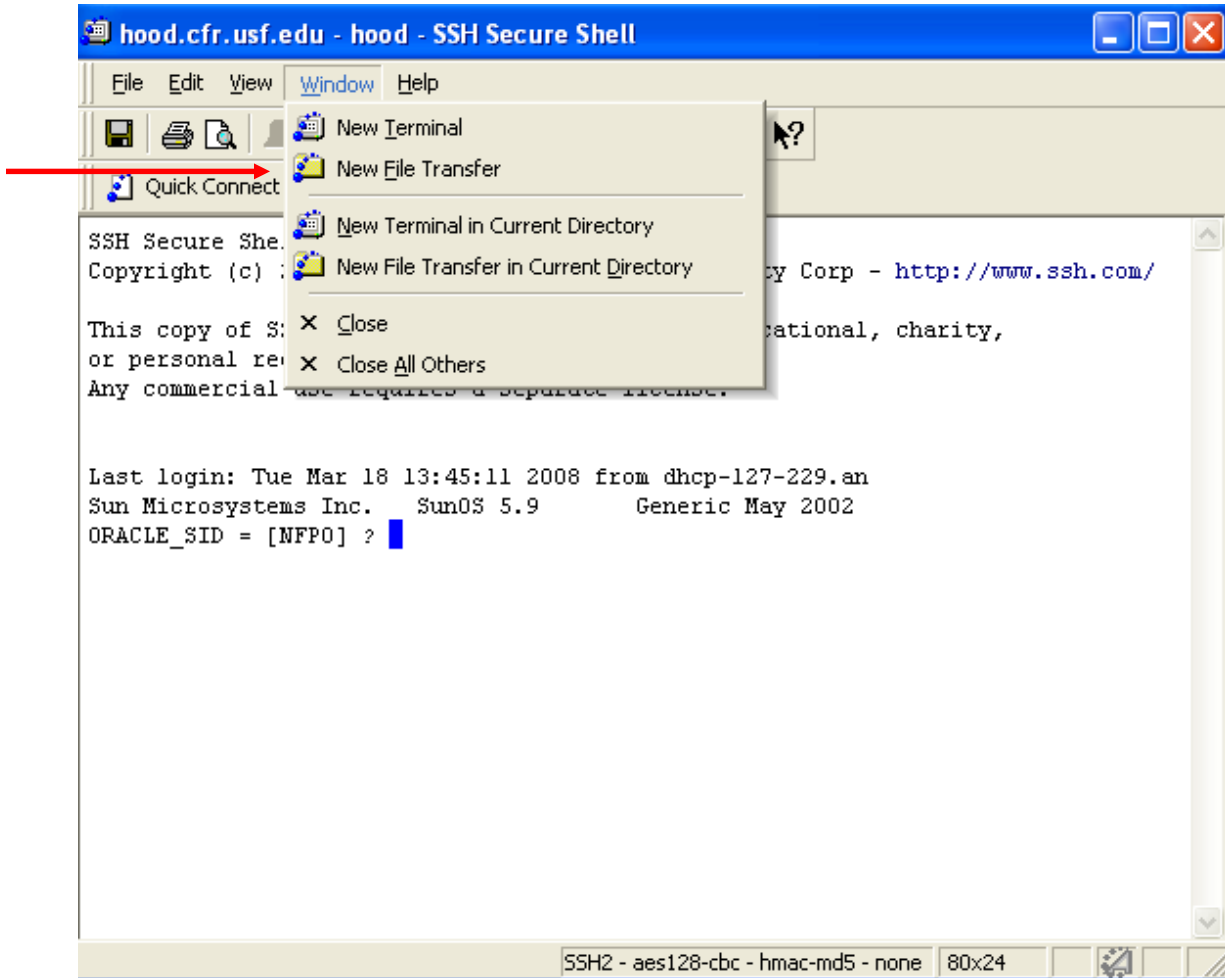
This copy of SSH Secure Shell is licensed for educational, charity,
or personal recreational or hobby use.
Any commercial use requires a separate license.

Last login: Tue Mar 18 13:45:11 2008 from dhcp-127-229.an
Sun Microsystems Inc.   SunOS 5.9       Generic May 2002
ORACLE_SID = [NFP0] ?
```

At the bottom of the window, there is a status bar that reads "Connected to hood.cfr.usf.edu" and "SSH2 - aes128-cbc - hmac-md5 - none 80x24".

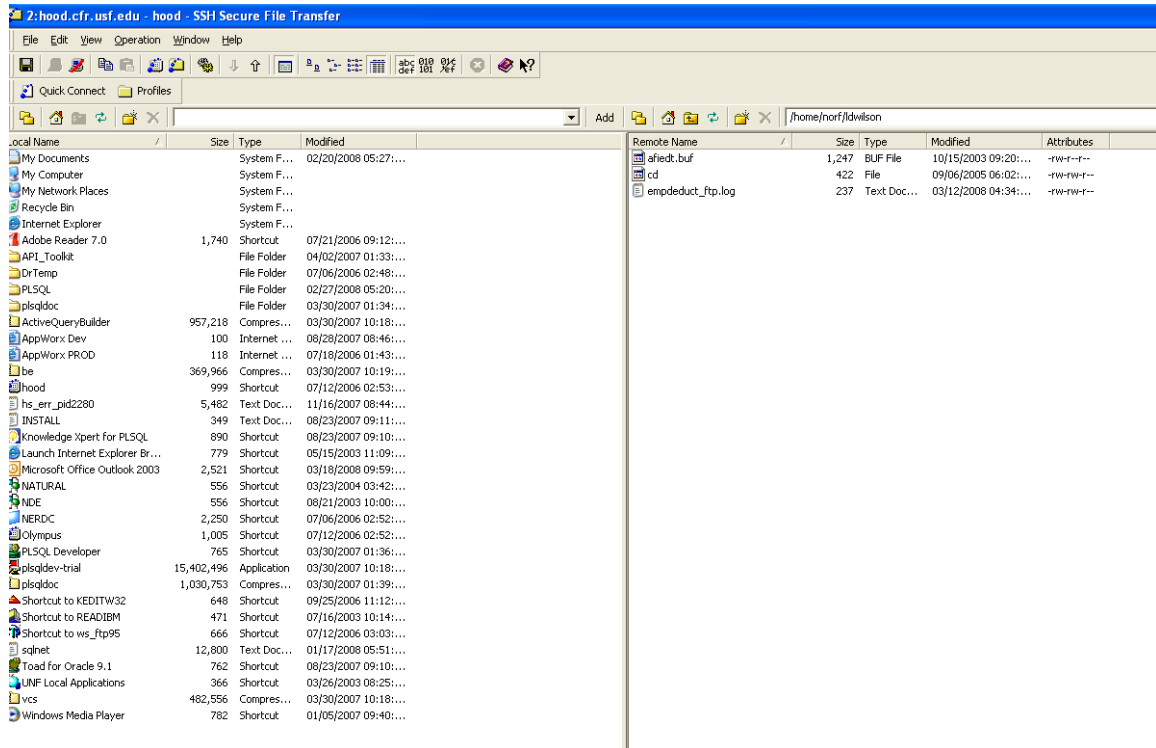
You are now in the UNIX window and can enter commands here as needed.

From here you can go to the File Transfer Section: click on WINDOW then select NEW FILE TRANSFER:



Now you are in the File Transfer mode:

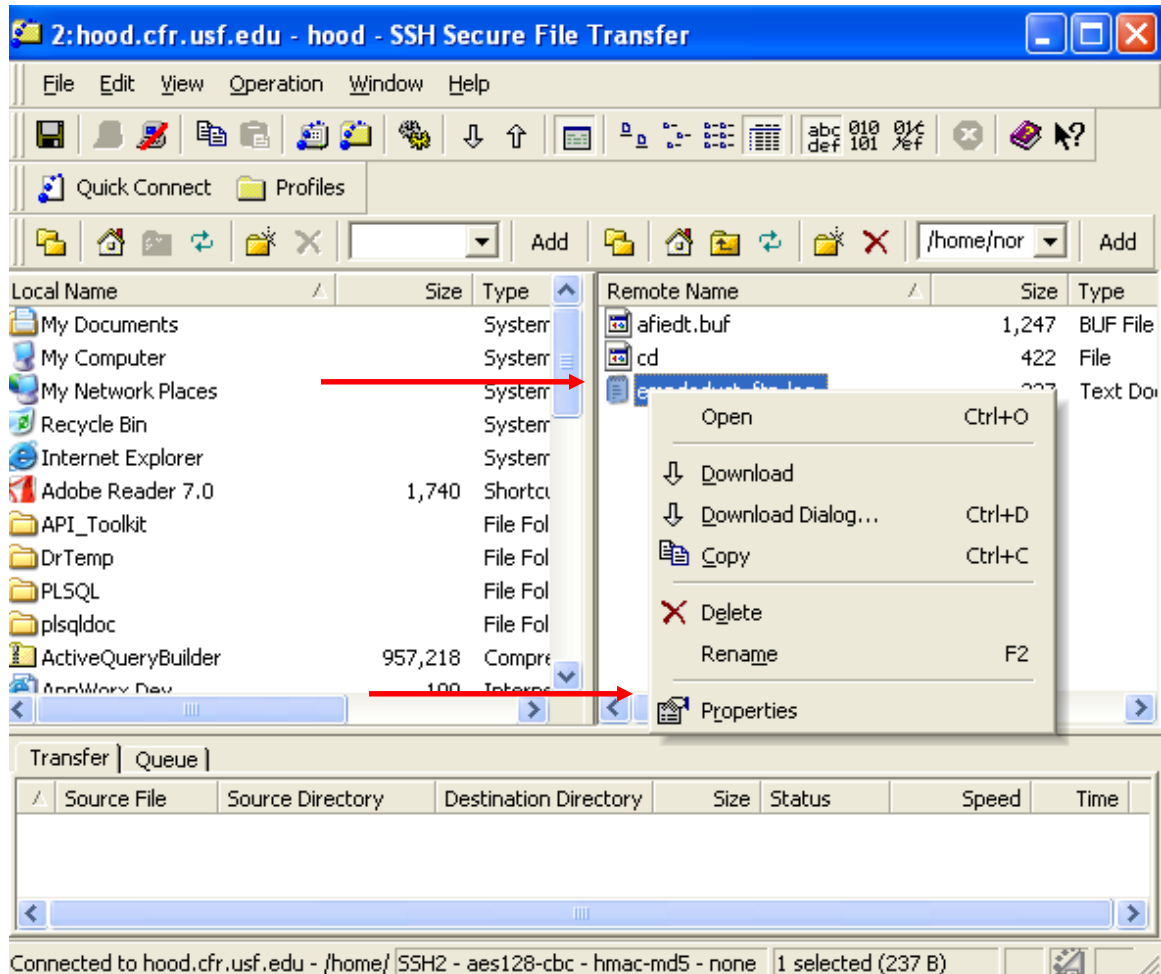
Left side is your local directory listings
Right side is the UNIX directories.



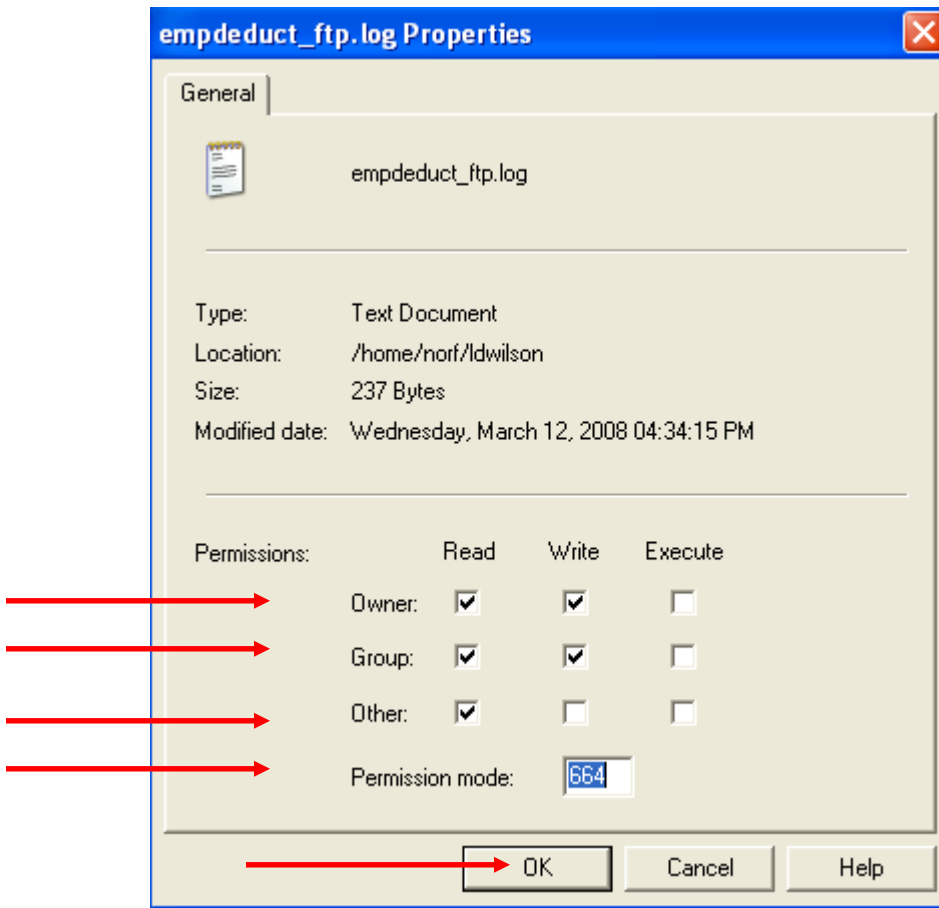
Move the files back and forth by click and drag method. There will be prompts to replace existing data.

You can set properties by 1) highlighting the file, right click
2) select PROPERTIES

You can use this in place of the ch mod command in Unix.



Here you can either enter the permissions needed in the permission mode box or check/uncheck the boxes to get to the desired number:



Click OK and you are finished with permissions.

Oracle Forms builder
Workflow