



Connecting to Unix

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Overview

⇒ Preliminaries

- Learning about Unix
- A note about different systems

⇒ Making a connection

- Using a telnet connection
- Using a workstations
- PC X Servers

A Note about Learning Unix

- ⇒ Structural models are important
 - Just what is an operating system
- ⇒ Figure out how to find information
 - Online resources
- ⇒ Unix can't be taught – it must be learned
 - Goofing around is a good way to learn
 - Try things out
 - *Listen to others "Why not use touch -r file file"*

A Note about different systems

⇒ Linux is not Solaris is not OSF Unix.

- There are Unix OS variations across platforms

⇒ The csh is not ksh is not bash

- There are shell variations that make a difference in both commands, options, and script capabilities

⇒ CDE is not Openwin is not twm

- There are differences in X window managers for different platforms and OSs

Making a connection

- ⇒ There are a couple ways to work on Unix.
- ⇒ The simplest, most basic approach:
 - Telnet from a PC or a terminal to a Unix system.
 - Use command line Unix commands to do work
 - Use Unix line editors to work on files
- ⇒ A mixed mode approach
 - Use PC tools to create or manipulate files
 - Use FTP to move files back and forth
 - Telnet to Unix to execute commands and manipulate files

Making a connection (2)

⇒ An advanced Unix approach

- Use a workstation running an X Window System
- Use graphical Unix editors and tools
- Use Xterms to execute commands

⇒ An advanced mixed mode approach

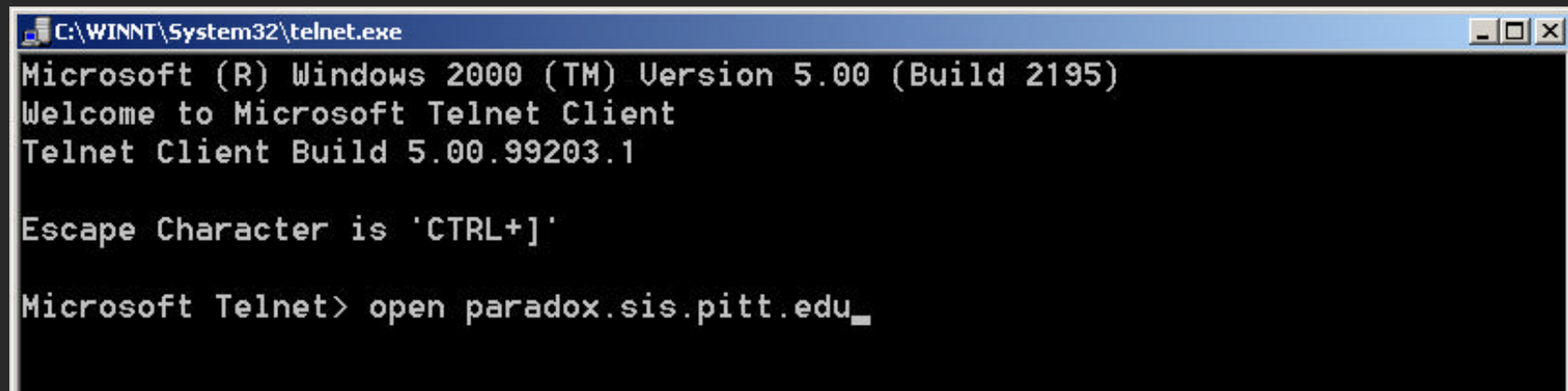
- Run PC software to make the PC an X-Terminal
- Establish either an XDM or Telnet connection to a Unix system
- Run graphical editors and tools on the Unix system with their displays set to the address of your X-Terminal

A PC telnet session

⇒ Run telnet

- On the start menu of an MS windows machine, there is a menu item called "Run"
- Select this item and type "telnet" in the text box
- When the DOS window opens with the telnet prompt, type "open" and the name of the machine to connect to:
open paradox.sis.pitt.edu
- When the machine responds, login to the remote host
- When done, "exit" from the remote machine, and close the DOS window

A Basic telnet window

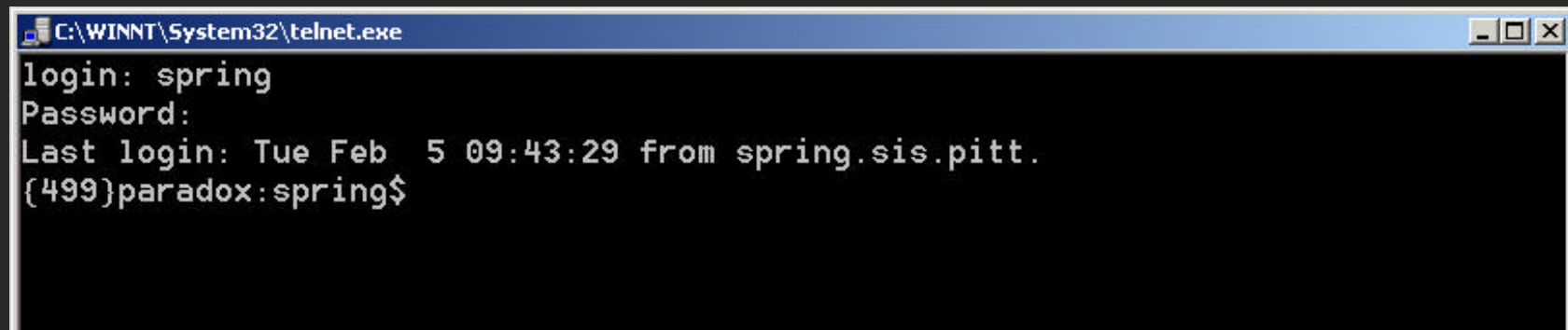


```
C:\WINNT\System32\telnet.exe
Microsoft (R) Windows 2000 (TM) Version 5.00 (Build 2195)
Welcome to Microsoft Telnet Client
Telnet Client Build 5.00.99203.1

Escape Character is 'CTRL+]'

Microsoft Telnet> open paradox.sis.pitt.edu_
```

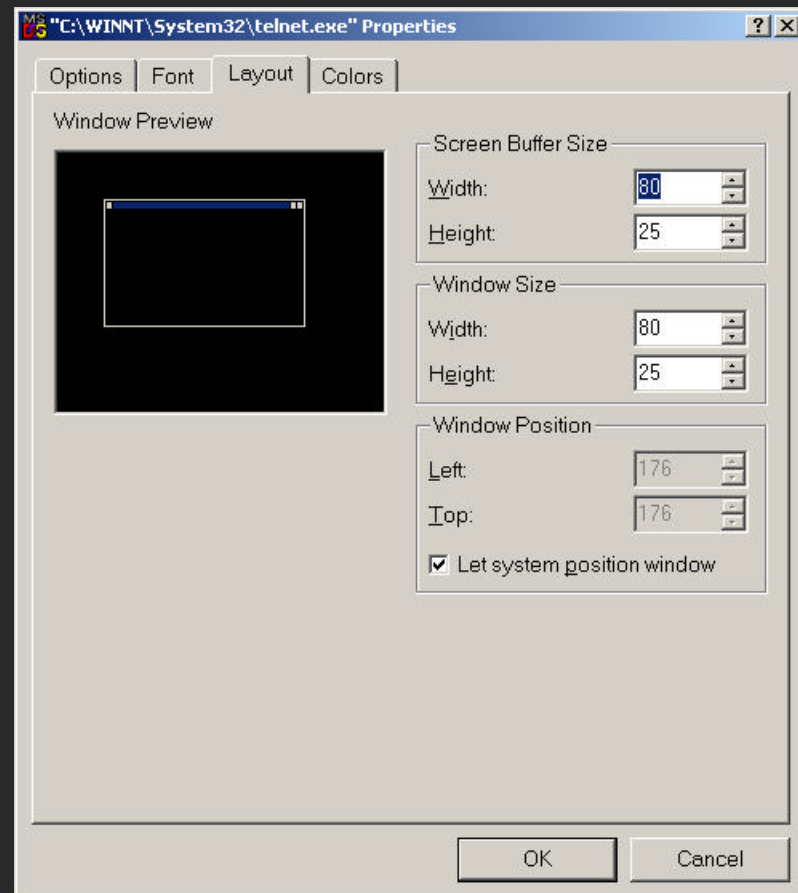
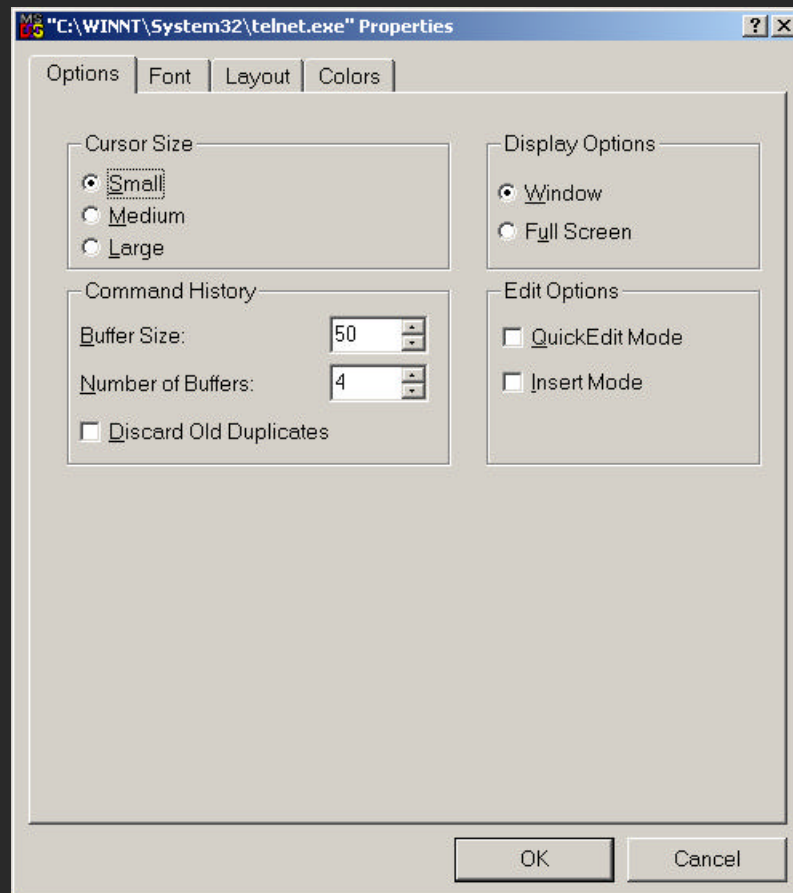
This screenshot shows a Windows 2000 telnet client window. The title bar reads 'C:\WINNT\System32\telnet.exe'. The main text area displays the Microsoft Windows 2000 version information, a welcome message, the telnet client build number, the escape character, and the command to open a connection to 'paradox.sis.pitt.edu'.



```
C:\WINNT\System32\telnet.exe
login: spring
Password:
Last login: Tue Feb  5 09:43:29 from spring.sis.pitt.
{499}paradox:spring$
```

This screenshot shows the telnet client after a successful login. The user 'spring' has entered their password and been granted access to the remote host 'paradox.sis.pitt.edu'. The prompt now shows the user's name followed by a dollar sign, indicating a shell session.

More on the telnet window



A Couple Commands in Telnet

```
C:\WINNT\System32\telnet.exe
login: spring
Password:
Last login: Tue Feb  5 09:55:01 from spring.sis.pitt.
{499}paradox:spring$ ls
abc.ksh      dp_dev      korn        nsmail      temp2
AdobeFnt.lst forte4j_user lib          projects    test.ps
bin          G_CASCADE  mail        public_html  vibe
CASCADE_STUFF icarus      mbs.dat     security
cs           images      mellon.gif  SunWS_config
cs_dev       is          News        temp
dp           Java        ns_imap     temp1
{500}paradox:spring$ ps
  PID TTY          TIME CMD
  6694 pts/43    0:00 bash
{501}paradox:spring$ _
```

Using a Workstation


⇒ A workstation provides the most natural access to Unix resources

- Login at the login screen
- Start at least one xterm session
- Run an graphical applications you wish
- Tailor your environment

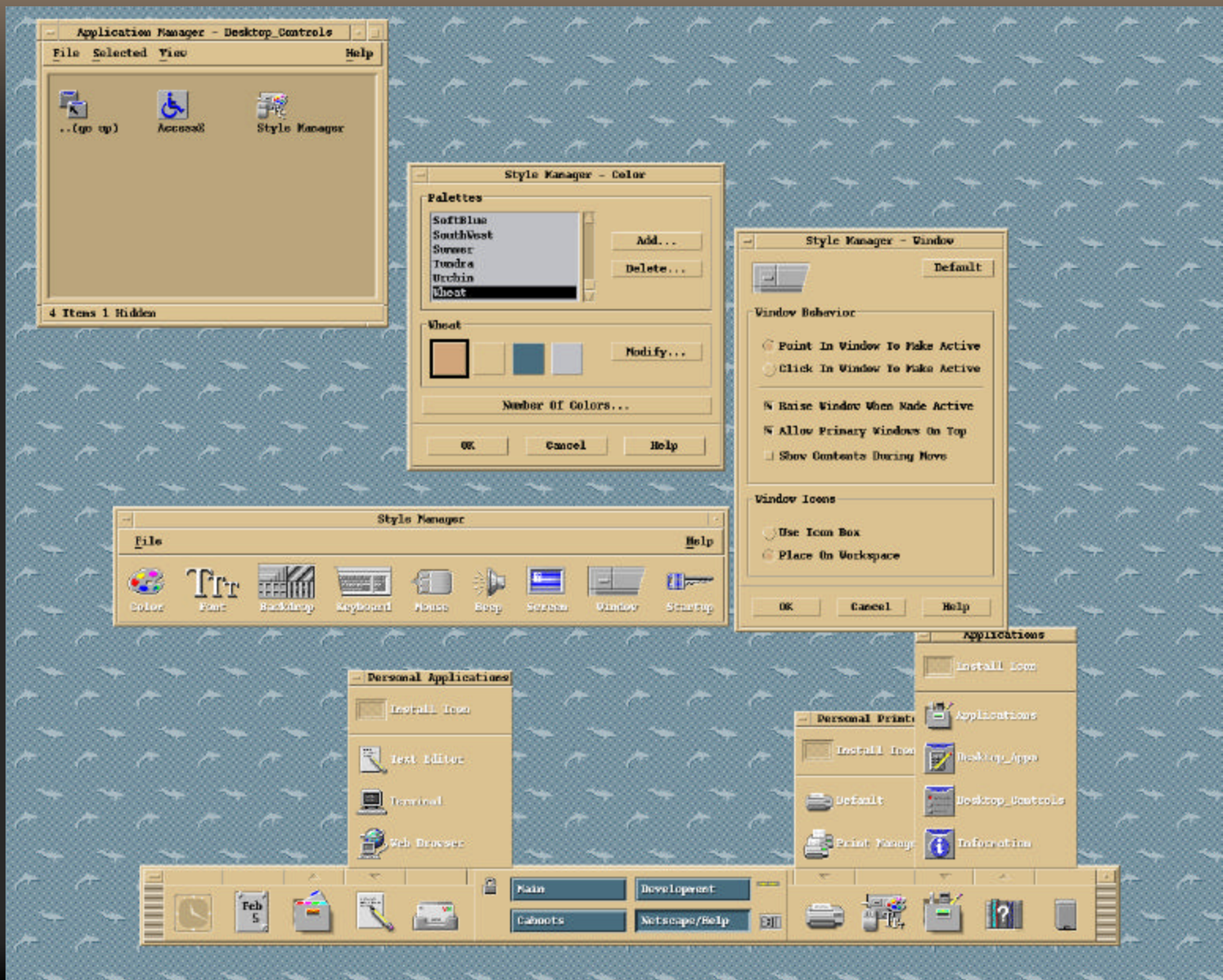
Login

Welcome to remote host sunfire3

Please enter your user name



Main Screen



Using a PC as an Xserver

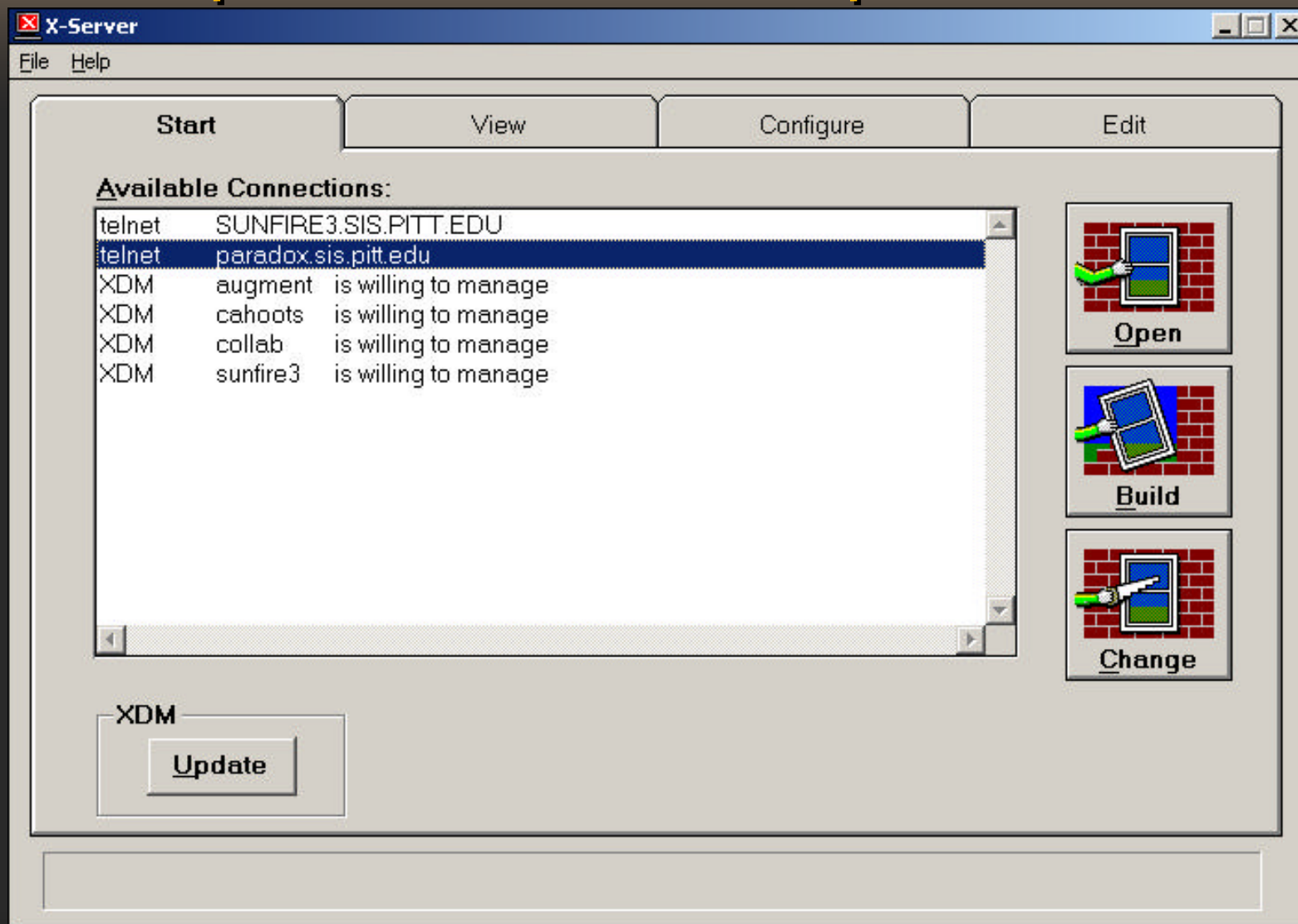
⇒ Configure the Lan Workplace Pro

- Set your terminal type
- Set the mode of operation

⇒ Open a telnet session to one or more hosts

- Run X applications as if you were at a workstation
- Run commands at the command line

Workplace Pro Startup



Workplace Configuration

The screenshot shows a 'Change Connection' dialog box with a title bar containing a small icon and the text 'Change Connection' and a close button. The dialog is divided into several sections. At the top, there is a 'Connection:' label followed by a text field containing 'telnet' and 'paradox.sis.pitt.edu'. To the right of this field are four buttons: 'OK', 'Cancel', 'Delete', and 'Help'. Below the 'Connection:' field is a 'Description:' label followed by an empty text field. Further down is an 'Attached Icon:' label followed by a dropdown menu showing 'None' and navigation arrows. The main body of the dialog is divided into three tabs: 'XDM', 'TCP/IP', and 'Serial'. The 'TCP/IP' tab is currently selected. Inside the 'TCP/IP' tab, there are four sub-tabs: 'telnet', 'rlogin', 'rsh', and 'rexec'. The 'telnet' sub-tab is selected. Below the sub-tabs, there are three labels with corresponding fields: 'Host Name:' with a dropdown menu showing 'paradox.sis.pitt.edu', 'Telnet Port:' with a text field containing '23', and 'Login Script:' with a dropdown menu. To the right of these fields is an 'Edit...' button.

Change Connection

Connection: telnet paradox.sis.pitt.edu

Description:

Attached Icon: None

OK
Cancel
Delete
Help

XDM TCP/IP Serial

telnet rlogin rsh rexec

Host Name: paradox.sis.pitt.edu Edit...

Telnet Port: 23

Login Script:

Workplace Configuration

The image shows a screenshot of the 'X-Server' configuration window. The window has a title bar with a red 'X' icon and the text 'X-Server'. Below the title bar is a menu bar with 'File' and 'Help'. The main area is divided into four tabs: 'Start', 'View', 'Configure', and 'Edit'. The 'Configure' tab is selected, and within it, the 'Terminal' sub-tab is active. The 'Terminal' settings are as follows:

Setting	Value	Option	Value
Terminal Reported:	XTERMS	<input type="checkbox"/>	DEC Prefix
Terminal Cursor Type:	SolidBlock	<input type="checkbox"/>	132 Column Mode
Backspace Key:	BS	<input checked="" type="checkbox"/>	Auto Line Wrap
Font Size:	Large		
Scroll Bar:	Right		
Scroll Buffer Size:	500		

The PC X Display/Multiple Windows

