

Accessing X-Windows Applications in the Web Browser

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Overview


- The Problem: Online Scheduling System
- Using Web Term X
- WebTermX Capabilities and Examples



The Problem

- Currently no online scheduling system
- Need a good calendar/scheduling program which runs on multiple platforms

Possible Solutions

- Many good calendar programs exist for the PC only
- Calendar Manager on Solaris UNIX is adequate, but this platform is not readily available
-  White Pine's WebTermX allows us to use X-Windows applications over the web.

Solution:



- Embeds live X-Windows applications inside a web browser
- Launch X Windows desktop sessions (like CDE)
- Supports REXEC, RSH, and XDMCP connections
- WebTermX wizard is very easy to use



X-Windows Applications

- Run under X-Windows
- Valuable information stored on the X-Windows system may be accessed
- No need to rewrite the application in Java

Using



- Requirements

- Windows 95, Windows 98, or Windows NT
- 100 MHZ PC with minimum 16 MB RAM
- Netscape or Internet Explorer
- Host Computer: Any UNIX or Open VMS V6.0 system running TCP/IP and X Windows

Using



- Host Computer Setup
 - IP Address or Hostname
 - Username and Password to an account
 - X Application command and arguments

Host Setup



WebTerm X Wizard

What is the hostname or IP address of the host that will run the X client?

flanders.uu.edu

What user name and password do you want for this connection? If you leave these fields blank, the user will be prompted for them at connection time.

User name

Password

☐ Account has no password

< Back Next > Cancel Help

Using



- Webpage setup
 - “run on arrival” or “on click of mouse”
 - number of seconds before time-out
 - embedded or non-embedded application
 - should the application remain open after browser closes?

Sample HTML Code

<EMBED

TYPE=application/x-webtermx

SRC=XwizTmp.wtx

URL="rexec://cm1:'Yu%5C|_Pn9%3A|yuP3%3C'%7CcF%7B93%5C@flanders.uu.edu/sh
-c 'DISPLAY=\$\$ME\$\$%3B export DISPLAY%3B
xclock -bg LightBlue -fg MidnightBlue -update 1';PasswordState=wp;TryOther=no"

PLUGINSOURCE=http://www.wpine.com/webtermx/wtx-pluginspage.html

WIDTH=176

HEIGHT=175

TOPLEVEL=OFF

WM_NAME=*

KEEPALIVE=0

AUTOSTART=ON

XTIMEOUT=120

REPORT_FONT_ERRS=ON

WM_ENABLE=OFF

PROTECT_COLORS=ON

XROOT_TOOLBAR=ON

SCREENDPI=96

SEARCH100FIRST=OFF

UUID=13631654-910394648>

</EMBED>

Problems

Encountered:



- Return following the X application command entry
- WTX files and Internet Explorer
- Plugin is required (5 MB)
- Built in error messages are helpful

ERROR



- Add the .W
- Add instruc
- Create link
- Create a lin

For more adminis



When an error occurs, the host will send a helpful error message. This error was caused by an extra return at the end of the command line.

Power of WebTerm X™

- With WebTerm X it is possible to
 - run Xterm (log into shell account)
 - use arguments with your X commands
 - log into full X-Windows session using XDM
 - embed both username and password so anyone may use the application
 - leave username and password blank and have WebTermX prompt the user on execution

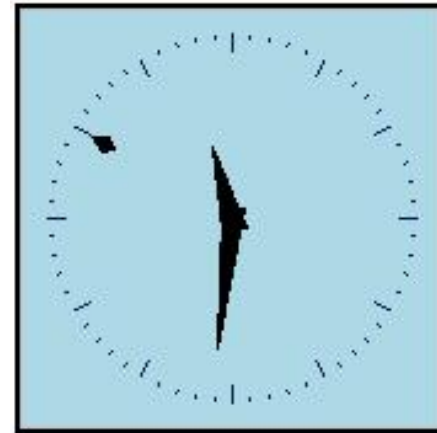
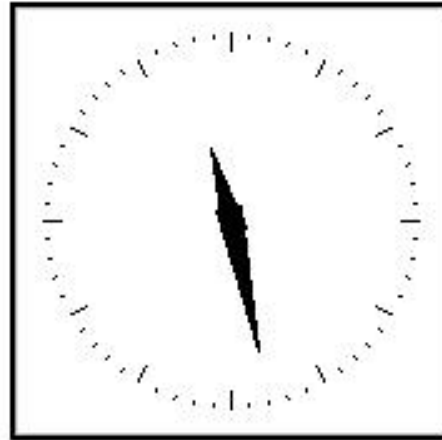
XTERM



```
cm1 has logged on tty0 from 204.194.175.155  
d_wilms has logged on ttya from local.  
cm1@flanders:~> █
```

This is a sample embedded xterm window that was opened inside a webpage using WebTermX.

XCLOCK



ARGUMENTS CAN ENHANCE:

The first application was created by xclock. The second, which has a second hand and is blue, was created by `xclock -bg LightBlue -fg MidnightBlue -update 1`

Calendar Manager :



CM Multi-Browser

Schedule... Mail... Goto: 11/2/98

☒ = Calendars Busy At Time Selected

- ☒ cm1@flanders
- jwilms@flanders
- root@flanders
- sdafafd@flanders
- sf@flanders
- wilms@flanders

Calendar: cm1@flanders

November 1998

	M	T	W	T	F	S	S
7	2	3	4	5	6	7	8
8							
9							
10							
11							
12							
1							
2							
3							
4							
5							
6							
7							

1 Calendar Displayed

Calendar Manager V3: cm1@flanders

View Edit Browse Print Prev Today Next

November 1998

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 2:00p IMP	3 2:00p BIG	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Calendar

Manager :



- View your own schedule
- View other people's schedules
- Schedule appointments for other people (if permitted)
- ☒ This is a viable solution to the problem.