Accessing X-Windows Applications in the Web Browser

By Sam Green
Union University
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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: WebTermX

- 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
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
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 WebTerm X™**

- **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%5Cl_Pn9%3AjyuP3%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”
PLUGINSPAGE=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
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.
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
This is a sample embedded xterm window that was opened inside a webpage using WebTermX.
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
This one screen shot from using a non-embedded Calendar Manager X-application.
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.