My Browser Research Project

Doug Clark

Our Browser is Mature

- Without attempting to disrupt or delay the current Dooble browser project
- What can we use until then?
- Concept – run a modern browser in a VM with OS/2 as the host

Which VM?

- Virtual PC doesn't run in AOS on multiprocessor systems.
- Vista?
- Virtual Box – impressive but has issues

VirtualBox on AOS

- Last release 5.0.51 – which is a beta
- Released around 2018
- Hosted on Netlabs

Vbox Warts

- Sometimes doesn't want to start
  may need to try multiple times to start or to wake.
- No USB, No COM port, NAT only network
- Shared folders work, with a specific sequence (permanent share, reboot guest OS)
- A bit piggy with the memory
- Installation issues with apps on guest OS

Installation Tips

- SET LIBC_HIGHMEM=2
- VIRTUAL_ADDRESSLIMIT=2048
  (3070 doesn't work well for me)
- DEVICE=VBoxDrv.Sys
- SET VBOX_USER_HOME=path
- Consult Read Me for 5.0.6 in Netlabs

Error

- NS_ERROR_FACTORY_NOT_REGISTERED

  Check for missing libvpx4.dll

- ANPM: in package libvpx-legacy-4

- Thanks Mark Szkolnicki - OS2World.com

Which OS?

- 32 bit or 64 bit?
- Linux
  - some 32 bit versions exist
- Windows XP 32 bit – smaller footprint
- Windows 7 32 bit – enables DRM content

Which Browser?

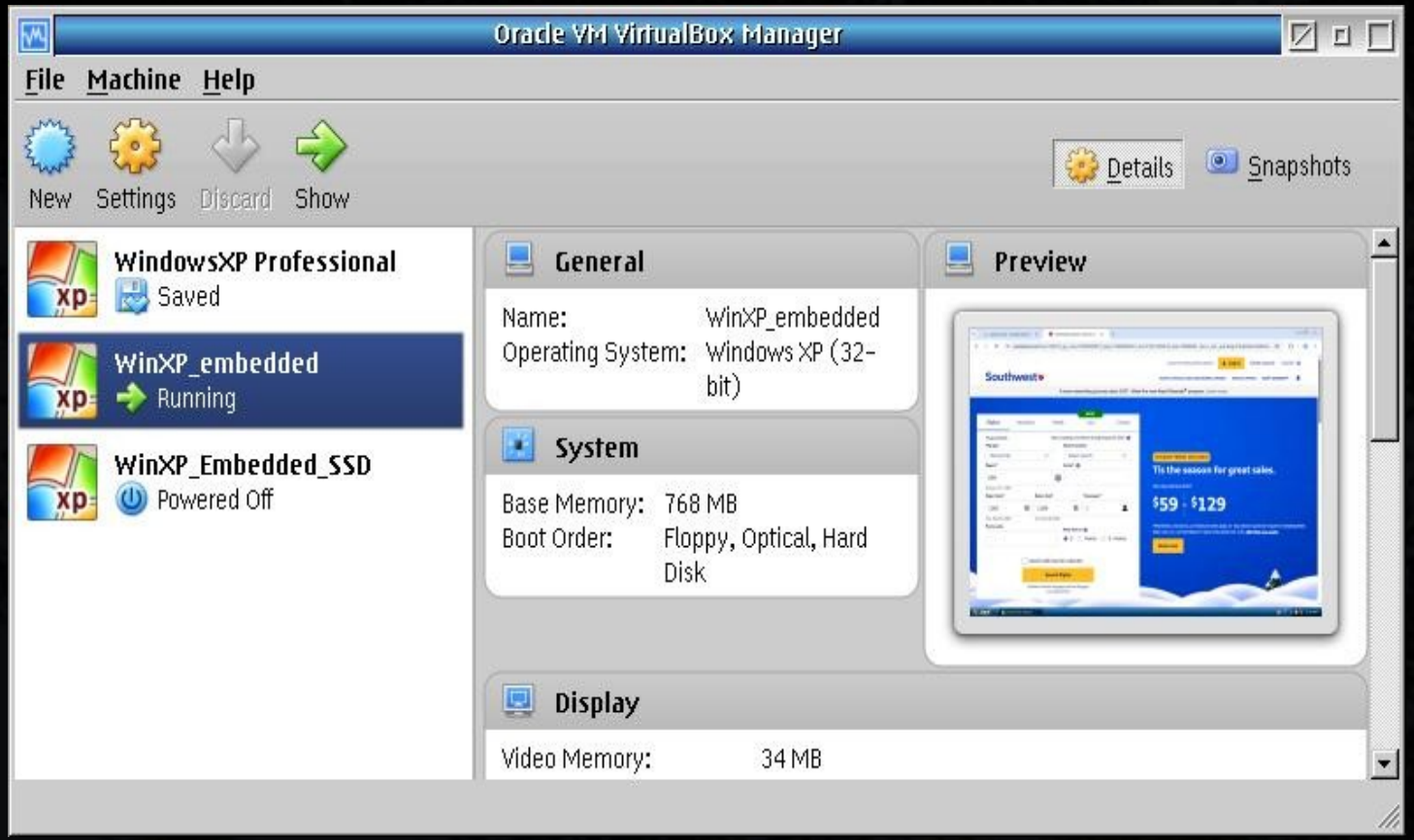
- Firefox 144/145 ESR last version
- Accesses most sites, runs Netflix videos on (Windows 7
- Supermium runs on Windows XP 32 bit
  does not play DRM on WinXP, does on Win7
  unGoogled chrome version

Which Windows XP?

- Retail version
- Windows Embedded POSReady 2009

  POS version much smaller – as small as 150mb disk space
- Pick your poison

WinXP Embedded



You have got to want it – Part 1

- Probably will not install on OS/2 host
- I installed WinXp Embedded on a Win7 host then copied vhd (virtual disk) to OS/2
- Probably need to install on a like version vbox
- May need to change the GUID of .vhd
- .VHD on SSD didn't make much difference

You have got to want it – Part 2

- Supermium will not install in WinXP running on OS/2 host
- Since you are already creating the WinXP system on another host, install Supermium there also

  Then copy the .VHD to OS/2

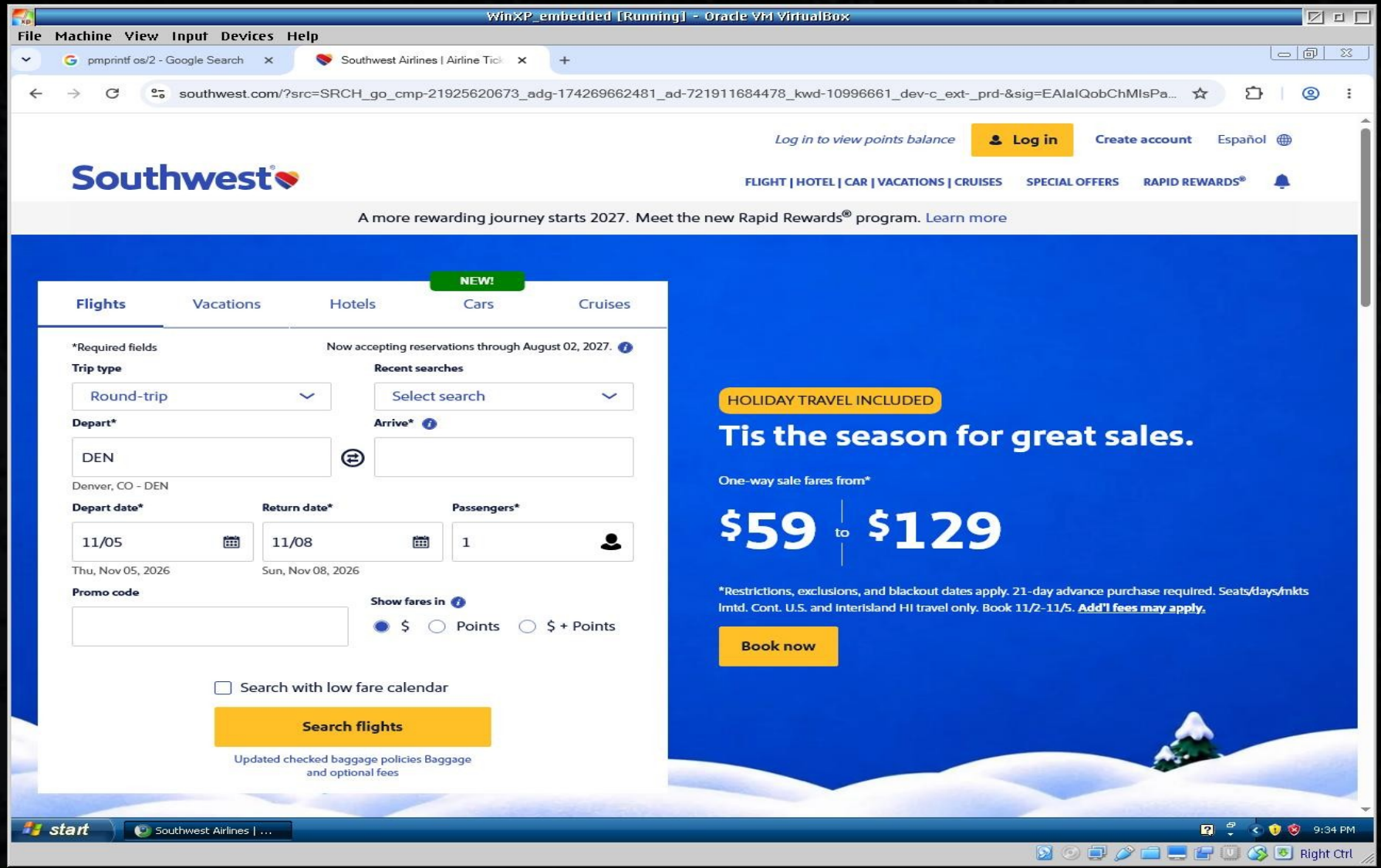
On the OS/2 Host

- Create a new virtual machine
- Point to the .VHD file you copied from the other machine
- Make sure you specify the same settings on this new virtual machine as you specified when you created it.

Better Method

- Find a .VHD file with XP and Supermium already installed

Don't expect whiplash



Issues

- Have to adjust memory settings in OS/2 VirtualAddressLimit=2048
- Minimize other OS/2 memory users: JFS cache, SNAP video memory usage, etc.
- Probably can't run with other apps at the same time.
- Turn off chipset virtualization – faster without

Issues part 2

- Minimize number of open tabs
- Stop and restart Supermium occassionally
- Vbox startup can be problematic
  starting from command line can help

Startup and Shutdown

- Start up

  vboxmanage startvm b9ae296c-8f09-4921-96c5-356a80103fb0

- Shutdown
  vboxmanage controlvm b9ae296c-8f09-4921-96c5-356a80103fb0 savestate