



IntERLab

Internet Education and Research Laboratory

DVTS

&

DVRelay Hands-On

Agenda

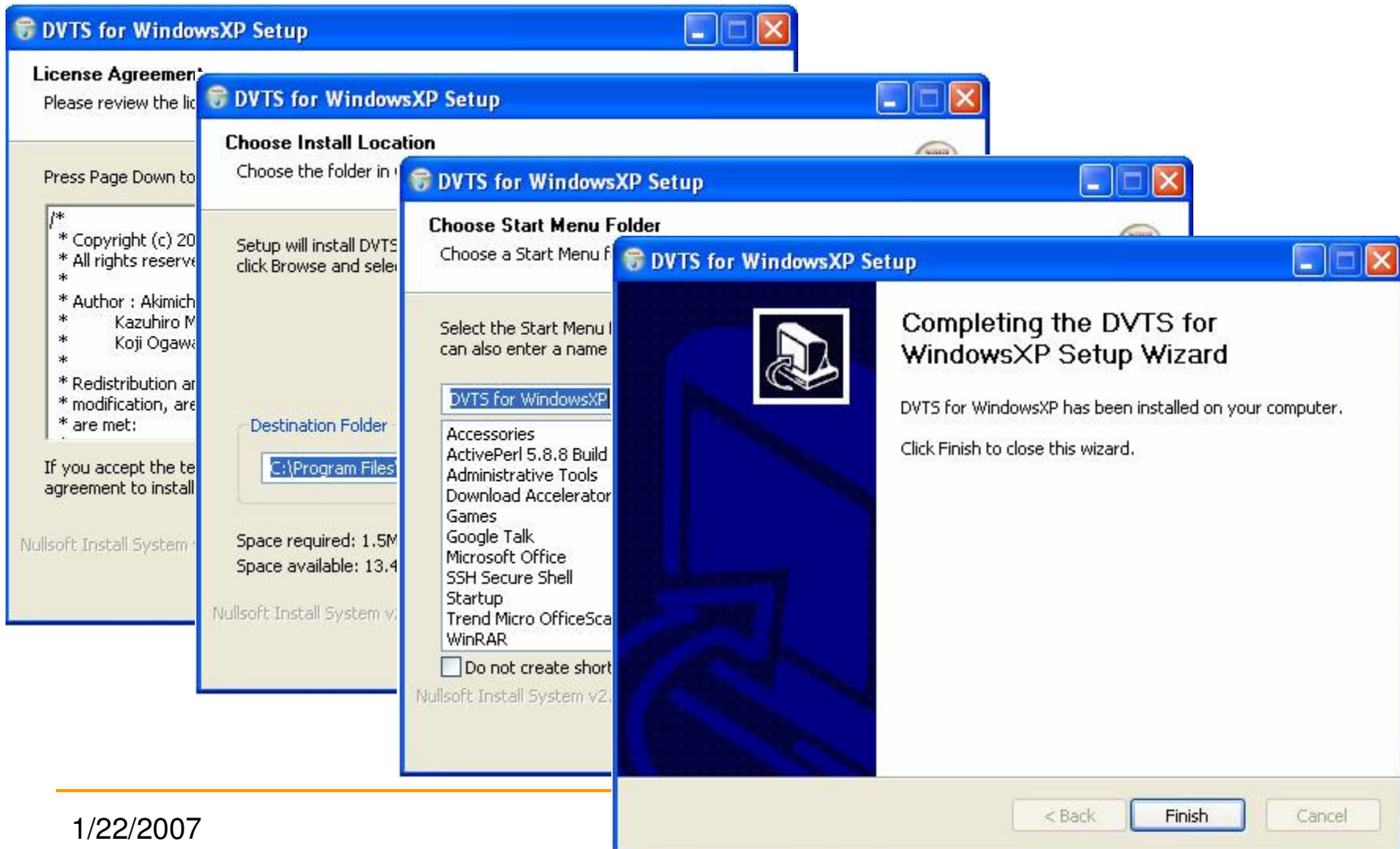
- Install DVTS
 - For Windows
 - For Linux (we are using Fedora Core)
- Install DVRELAY
 - For Linux Only
 - dvrelay0.1f
 - dvrelay0.1m
- Using DVRELAY
- Using VClass DVTS Simulator & Mobile VClass

Install DVTS for Windows

- Get the source
 - <http://www.sfc.wide.ad.jp/DVTS/software/win2000/setup-0.0.2-1.exe>
 - Run the installer program



Install DVTS for Windows



DVTS for WindowsXP Setup

License Agreement
Please review the license agreement...

Press Page Down to accept the license agreement.

- * Copyright (c) 2006
- * All rights reserved.
- * Author : Akimichi Kazuhiro, Koji Ogawa
- * Redistribution and modification are permitted.

If you accept the terms of the license agreement, click Finish to install.

Nullsoft Install System v2.20

DVTS for WindowsXP Setup

Choose Install Location
Choose the folder in which to install DVTS for WindowsXP.

Setup will install DVTS for WindowsXP in the following folder:
C:\Program Files

Space required: 1.5MB
Space available: 13.4MB

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DVTS for WindowsXP Setup

Choose Start Menu Folder
Choose a Start Menu folder for DVTS for WindowsXP.

Select the Start Menu folder. You can also enter a name.

DVTS for WindowsXP

- Accessories
- ActivePerl 5.8.8 Build
- Administrative Tools
- Download Accelerator
- Games
- Google Talk
- Microsoft Office
- SSH Secure Shell
- Startup
- Trend Micro OfficeScan
- WinRAR

Do not create shortcuts

Nullsoft Install System v2.20

DVTS for WindowsXP Setup

Completing the DVTS for WindowsXP Setup Wizard

DVTS for WindowsXP has been installed on your computer.

Click Finish to close this wizard.

< Back Finish Cancel

DVTS for Linux - Requirements

- Need **Linux Kernel Source** installed
 - kernel-2.6.11-1.1369_FC4.src.rpm
 - # rpm -Uvh kernel-2.6.11-1.1369_FC4.src.rpm
 - # cd /usr/src/redhat/SPECS/
 - # rpmbuild -bp --target \$(uname -m) kernel-2.6.spec
 - # cd /usr/src/
 - # ln -s /usr/src/redhat/BUILD/kernel-2.6.18/linux-2.6.18.i686 /usr/src/linux

DVTS for Linux - Requirements

- **libraw1394** should be installed
 - <http://sourceforge.net/projects/libraw1394>
 - # tar zxvf libraw1394-1.2.1.tar.gz
 - # cd libraw1394-1.2.1
 - # ./configure
 - # make
 - # make install
 - # make dev

Install DVTS for Linux

- Get the source
 - <http://www.sfc.wide.ad.jp/DVTS/software/dvts1.0e.tar.bz2>
 - tar jxvf dvts1.0e.tar.bz2
 - cd dvts1.0e
 - ./configure
 - make
 - make install

DVRelay for Linux

- dvrelay with frame reduction
 - dvrelay0.1c.tar.gz
- dvrelay with motion detection and frame reduction
- dvrelay with frame reduction and CBR
 - dvrelay0.1f.tar.gz
- dvrelay with frame reduction + motion detection + CBR
 - Merging is on the process

DVRelay for Linux – Requirements

- Install libraw1394
- Install libdv
 - <http://sourceforge.net/projects/libdv/>
 - libdv-1.0.0.tar.gz
 - tar zxvf libdv-1.0.0.tar.gz
 - ./configure
 - make
 - make install
- Install libdv-devel
 - yum install libdv-devel

Install DVRelay

- Get the source of dvrelay (dvrelay0.1f.tar.gz)
- `tar zxvf dvrelay0.1f.tar.gz`
- `cd dvrelay0.1f`
- `./configure`
- `make`
- `make install`

Some Errors

```
[root@localhost dvts1.0e]# make
Making all in dvsend
make[1]: Entering directory `/root/dvts/dvts1.0e/dvsend'
source='main.c' object='main.o' libtool=no \
  depfile='.deps/main.Po' tmpdepfile='.deps/main.TPo' \
  depmode=gcc3 /bin/sh ../depcomp \
  gcc -DHAVE_CONFIG_H -I. -I. -I../include -I/usr/src/linux/drivers/ieee1394/ -
  DLINUX -DNO_SS_LEN -DINET6 -g -O2 -Wall -c `test -f main.c || echo './`main.c
In file included from param.h:4,
  from main.c:56:
ieee1394-struct.h:39:32: error: libraw1394/raw1394.h: No such file or directory
ieee1394-struct.h:40:28: error: libraw1394/csr.h: No such file or directory
main.c: In function 'main':
main.c:281: warning: implicit declaration of function 'set_signal_behavior'
make[1]: *** [main.o] Error 1
make[1]: Leaving directory `/root/dvts/dvts1.0e/dvsend'
make: *** [all-recursive] Error 1
```

How to use DVRelay (options)

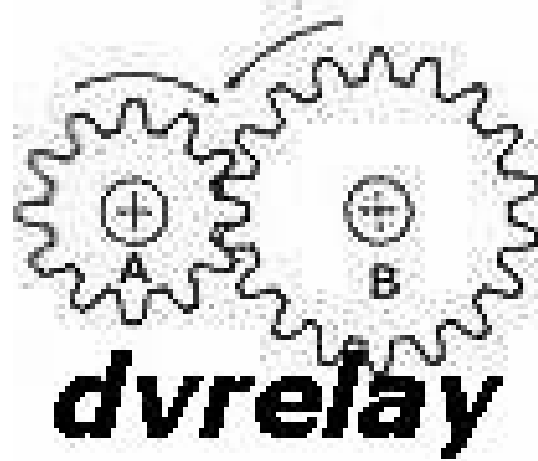
- -H: show help message
- -v: show version number
- -4: use IPv4 (default is IPv6)
- -h <host IP>: sent to host IP
- -j <group address>: join multicast address
- -M ifname: multicast join interface
- -t ttl: TTL for multicast
- -P port: RTP port number
- -p: use PAL

How to use DVRelay (options)

- -L: show packet loss
- -C: use CBR queue for forwarding packets
- -a: use motion detection
- -f rate: send full frame by $30/\text{rate}$ frame/sec
- -s number: number of DIF blocks included in one packet

Examples

- `dvrelay -4 -j 224.1.1.1 -h 225.1.1.1 -L -C`
- `dvrelay -j ff38:20:2001:0d30:101:1:1:1 -h
ff38:20:2001:0d30:101:1:1:2 -L -C`





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Thank You
