Install Files

Licensing

Fusion for Linux requires a network license. If you are using a pre-existing windows license server you will not need to use the HASP drivers or FlexNET for Linux.

FLEXnet_eyeon.tar.gz - This contains all the FLEXnet files. Install instructions are contained in the PDF within that archive.

HDD_Linux.tar.gz, HASP_SRM_Linux_3.50_Redistribute.tar.gz - These are the HASP drivers for Linux. There are a couple of readme.txt files in there that explain how to install the driver(s).

With both the FLEXnet files and the HASP drivers, the user/sysadmin will have to add things to a script to start them each time the machine boots (or a user logs in).

eyeon_wine

Download the eyeon_wine RPM package from the Fusion Downloads page. This is the package for an eyeon specific version of Wine. Source for eyeon_wine is available on request.

32-bit vs 64-bit

eyeon_wine packages are available for both i586 and x86_64 architectures. The i586 package provides only 32-bit wine runtime and should be installed on 32-bit Linux distributions. The x86_64 package provides both 32-bit and 64-bit wine runtimes and should be installed on 64-bit Linux distributions. The i586 and x86_64 packages can not be installed together on the same system.

32-bit requirements

When installing eyeon_wine on a 64-bit Linux distribution, you must also install 32-bit compatibility libraries. The requirements vary from distribution to distribution and even on the same distribution, the list can change over time as patches and updates are released, so we can not give you a definitive set of packages. The RPM packages stipulate some 32-bit library requirements, however this list may also help:

alsa-lib
dbus-libs
expat
fontconfig
freetype
glibc
libICE
libSM
libX11
libXau
libXcomposite
libXcursor
libXdamage
libXdmcp
libXv
libXvMC
libXext
libXfixes
libXi
libXinerama
libXrandr
libXrender
libXxf86vm
libdrm
libgcc
libgcrypt
libgpg-error
libjpeg-turbo
libpng
libpthread
libstdc++

libuuid
libxcb
libxml2
libxslt
mesa-libGL
mesa-libGLU
ncurses-libs
zlib
libtiff
libtool-ltdl
libvdpau
readline
unixODBC
xorg-x11-drv-nvidia-libs

See your Linux distribution documentation and on-line help/forums for more information on obtaining a full set of 32-bit compatibility libraries.
Install

To install the 32-bit package:

rpm -i eyeon_wine-1.3.21.2-1.i586.rpm

or to install the 64-bit package:

rpm -i eyeon_wine-1.3.21.2-1.x86_64.rpm

Upgrade

To upgrade from an older release of the 32-bit eyeon_wine package:

rpm -Uvh eyeon_wine-1.3.21.2-1.i586.rpm

or to upgrade from an older release of the 64-bit eyeon_wine package:

rpm -Uvh eyeon_wine-1.3.21.2-1.x86_64.rpm

Configuration

Current builds of eyeon_wine have moved all configurations from ~/.wine to ~/.eyeon_wine to allow for a side-by-side installation of mainstream Wine releases and eyeon specific releases. Registry keys should go into ~/.eyeon_wine/system.reg file; /opt/eyeon/wine/bin/regedit should be used to get a regedit GUI, which will use the correct registry storage.

Once a user has used the x86_64 wine package, their ~/.eyeon_wine installation will be upgraded to support 64-bit wine. If the user then decides to move back to the i586 wine package, they will need to delete ~/.eyeon_wine and allow the 32-bit only version to recreate the directory.
Fusion

Download the Fusion RPM package from the Fusion Downloads page.
32-bit vs 64-bit

Starting with Fusion 6.2, packages are available for both i586 and x86_64 architectures. The i586 package provides the 32-bit version of Fusion and can be installed on 32-bit and 64-bit Linux distributions. The x86_64 package provides the 64-bit version of Fusion and can only be installed on 64-bit Linux distributions. The i586 and x86_64 packages can be installed together on the same system. 64-bit versions of Fusion packages have 64 in their name.
Side by side installation of multiple releases

Starting with Fusion 6.2, it is possible to have multiple releases of Fusion installed at the same time. RPM can still be used to manage updates to each release. To support this functionality, the release is now included in the name of the package.
Install

To install the 32-bit package:

rpm -i eyeon_fusion_6.2-6.2.0.853-2.i586.rpm

and/or to install the 64-bit package:

rpm -i eyeon_fusion64_6.2-6.2.0.853-2.x86_64.rpm

Upgrade
Fusion 6.2 and later
Upgrading the same release

To upgrade the 32-bit package for release 6.2:

rpm -Uvh eyeon_fusion_6.2-6.2.0.853-2.i586.rpm

and/or to upgrade the 64-bit package for release 6.2:

rpm -Uvh eyeon_fusion64_6.2-6.2.0.853-2.x86_64.rpm

Upgrading to a new release

To upgrade the 32-bit package from release 6.2 to release 6.4:

rpm -i eyeon_fusion_6.4-6.4.2.999-1.i586.rpm
rpm -e eyeon_fusion_6.2

and/or to upgrade the 64-bit package from release 6.2 to release 6.4:

rpm -i eyeon_fusion64_6.4-6.4.2.999-1.x86_64.rpm
rpm -e eyeon_fusion64_6.2

Versions prior to Fusion 6.2

In order to properly support side by side installation of multiple releases, we recommend that you uninstall previous versions of Fusion RPMs:

rpm -e eyeon_fusion

OpenGL vs non-OpenGL Render Nodes
Fusion 6.1 and later

As of Fusion 6.1, we only offer the OpenGL option and therefore require an X11 display that supports a number of OpenGL extensions. In practice, this means that the render node requires an OpenGL capable graphics card. In theory, a machine could provide a software based implementation utilising such packages as Xvfb and mesa, but this is neither tested nor supported. Please feel free to share your experiences if you decide to go down this route.
Fusion 5.3

In Fusion 5.3, we offered two Linux versions of the "render node".

eyeon_consoleslave_5.3.1.74.i586.rpm is a non-OpenGL version. It does not require a working X11 server, but it will not render any OpenGL tools (PAW and some plugins), as these tools require an OpenGL capable machine.

eyeon_renderslave_5.3.1.74.i586.rpm requires OpenGL to run and will render OpenGL tools, provided an X11 server with OpenGL is running. Inside the eyeon_renderslave.rpm file is a second copy of a ConsoleSlave.exe, but this is a secondary interface to the same exe build - it still requires OpenGL and an X11 server. You can use this version to run any OpenGL comps via your command line renderer.

Setup
Wrapper scripts

There are wrapper scripts provided for Fusion, ConsoleSlave and RenderSlave. These are located in /opt/eyeon/bin. The wrapper scripts are the preferred method for launching each of the above programs. The scripts set up the required environment and will also import settings from a configuration file in the user's home directory.
Configuration file

The per-user configuration is located in ~/.eyeon_fusionrc and is a bash script. If this configuration file does not exist, a template will be created by the wrapper scripts.
License server

The user will need to point Fusion to a source of a valid license. This can be achieved by setting the environment variable EYEON_LICENSE_FILE to point to the correct license server. The simplest method is to edit the ~/.eyeon_fusionrc configuration file to include a line similar to this:

EYEON_LICENSE_FILE="@licenseserver;"

The same result can be achieved by manually configuring the environment variable in the shell by using:

export EYEON_LICENSE_FILE="@licenseserver;"

Fonts

You will need to acquire a number of Windows fonts in order for the Fusion interface to appear correct. The fonts are;

tahoma.ttf
marlett.ttf
micross.ttf
sserife.fon

Fusion can be configured to look for fonts in multiple locations. This can be achieved by setting the environment variable FUSION_FONTS to include a list of semicolon separated paths. The ~/.eyeon_fusionrc configuration file can include a line similar to this:

FUSION_FONTS="/usr/share/fonts;/usr/local/fonts/truetype"

In Fusion 5.3, the wrapper script will check if the FUSION_FONTS environment variable is set. If it is not, then a font discovery script located in /opt/eyeon/bin/find_fontdirs will use fontconfig to scan the system for fonts and set FUSION_FONTS accordingly.

In Fusion 6.1 and later, the wrapper script has been deprecated and Fusion will first look in the list of semicolon separated paths listed in the FUSION_FONTS environment variable, if any, and finally in /usr/share/fonts.

Prefs

The default Profiles (prefs) directory is User:Fusion/Profiles (i.e. $HOME/Fusion/Profiles), similarly things like the Comps, Defaults, Settings, etc. dirs are in the UserData: directory. So prefs, comps, defaults, etc. will by default NOT use the ones in the Fusion dir. This does mean that any of the Comps, Scripts, Defaults, Macros, etc. contained within the Fusion RPM file won't be immediately available to a Linux user.

Profile

The profile dir can be changed with the FUSION_PROFILE_DIR env var, then the individual profile subdir within that can be set using the FUSION_PROFILE env var, just like the Windows version. Most users would likely want to use the eyeonServer_LibrariesDir env var to set an appropriate UserData: or $HOME related path for eyeonServer too. Unlike the FUSION_PROFILE_DIR env var, it doesn't have access to pathmaps, so it must contain a full normal path. Since eyeonServer usually uses a Libraries directory off its own executable directory, if it is run from a common read-only place it likely won't be able to create its directory and serve even local bins. So changing the eyeonServer_LibrariesDir env var is probably essential.

Known Issues

NVidia Driver Issue

There appears to be some NVidia drivers that do not do data format conversions properly. When this is the case the top half of 16bit int or 16bit or 32bit float textures in the 3D view will be black.

If this happens setting the env var FUSION_TEXTURE_CONVERT=True will cause Fusion to do the data conversions, and that will hopefully get around the problem. This issue doesn't affect viewing 2D images.

Tablets

Some problems may occur when dragging certain view controls on a second monitor when using a tablet. If this happens, use of tablet messages can be disabled with the env var FUSION_TABLET=False. The down-side of this is that Paint won't get pressure information anymore.

Additionally, installing tablet drivers and then attempting to run Fusion without a tablet connected to the machine may result in a failure within Wine. These issues should now be resolved with the latest version of Wine.

Help

Linux Fusion contains an HTML version of the help. There's no easy way for Fusion to determine automatically which app to use to view it (file associations are all desktop system specific), so Fusion uses the HelpApp entry in the Help/Linux.helpmap file. Same goes for VFXpedia help, except of course it uses the entry in the Online.helpmap file. Those files currently have the HelpApp entry set to /usr/bin/firefox. If of course Firefox is somewhere else, or Firefox isn't installed but some other browser is, then those entries will need to be changed.

Too many font directories

In some cases the /opt/eyeon/bin/find_fontdirs script can find too many font directories, which can result in the search path being truncated. The workaround is to use a shorter font path by specifying directories that are parents of the desired font directories. Because Fusion uses a recursive scan, fonts in subdirectories will be found. For example:

FUSION_FONTS="/usr/share/fonts;/usr/local/fonts/truetype"

Distribution Specific Install Instructions

Fedora Core 11 x86_64

Fedora Core 11 x86_64 does not install a complete set of 32 compatibility libraries. When first installing the Fusion RPM you will likely see something like the following :

error: Failed dependencies:

libasound.so.2 is needed by eyeon_wine-1.1.19.1-2.i586
libICE.so.6 is needed by eyeon_wine-1.1.19.1-2.i586
libxslt.so.1 is needed by eyeon_wine-1.1.19.1-2.i586
libxml2.so.2 is needed by eyeon_wine-1.1.19.1-2.i586
libz.so.1 is needed by eyeon_wine-1.1.19.1-2.i586
libXxf86vm.so.1 is needed by eyeon_wine-1.1.19.1-2.i586
libXext.so.6 is needed by eyeon_wine-1.1.19.1-2.i586
libX11.so.6 is needed by eyeon_wine-1.1.19.1-2.i586
libSM.so.6 is needed by eyeon_wine-1.1.19.1-2.i586
libresolv.so.2 is needed by eyeon_wine-1.1.19.1-2.i586
libpthread.so.0 is needed by eyeon_wine-1.1.19.1-2.i586

libm.so.6 is needed by eyeon_wine-1.1.19.1-2.i586
libdl.so.2 is needed by eyeon_wine-1.1.19.1-2.i586
libc.so.6 is needed by eyeon_wine-1.1.19.1-2.i586
libGL.so.1 is needed by eyeon_wine-1.1.19.1-2.i586
libGLU.so.1 is needed by eyeon_wine-1.1.19.1-2.i586

The related libraries will need to be installed via the GUI package installer, or via YUM on the command line. The site www.rpmfind.net can be extremely useful for locating the correct library for each dependency.