Subject: Continuing Linux Education
Posted by David Fanning on Sat, 04 Feb 2006 00:12:08 GMT
View Forum Message <> Reply to Message

Folks,

In the interest of sharing my (interesting) experience re-learning
the UNIX operating system, I have a couple of questions.

I have managed to get Fedora Core 4 installed and dual-booting
on my laptop. And I just installed IDL in the usual place, with
an unremarkable setup, and I modified my .bashrc file,
and now I can start IDL with a simple "idl" command. And I
can start emacs and load a "pro" file, and it shows up in
IDLMODE. Hurray!!

So I think I am golden, and start to work through the
IDLWAVE tutorial, and pretty much *nothing* works as
outlined there. I can't select the entire buffer with C-x h,
my END doesn't change to ENDFOR when I position my cursor
at the end of END and hit the space key, and--most particularly--
C-c C-s tells me IDL can't be found. :-(

On the bright side, I can do a m-RET and get a real line break!

I feel like I am making some progress, but I am feeling
more simpatico with my astronomer friends all the time.
Any good ideas are welcome, and soon. I've already picked
this computer up three times this afternoon with the
intention of pitching it out the window, before good sense
intervened. :-(

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Continuing Linux Education
Posted by David Fanning on Mon, 06 Feb 2006 17:37:57 GMT
View Forum Message <> Reply to Message

JD Smith writes:

> As far as the tutorial, the IDLWAVE which is bundled with Emacs is
> ancient: 4.7 or something. Almost 4 years old (which is about how old
> the current Emacs is, sadly). It probably even pre-dates the
> turorial, and is missing many features. You should upgrade your
> IDLWAVE; see idlwave.org. My recommendation is to wait for the
> IDLWAVE 6.0 announcement which will be going out soon, and upgrade
> then. Then the HTML help RSI supplies with your IDL 6.2 will work
> "out of the box", and you won't need to do anything more to configure
> your context help. By the way, Emacs 22, when it ships, should have a
> nice modern version of IDLWAVE, so the need to upgrade will be much
> reduced.

Shoot. And I am getting so used to doing clean installs and then
downloading everything again and again. It will be a shame to
lose all those skills. :-)

Anyway, now I have a good version of IDL, Emacs and IDLWAVE
all working, more or less, together. But here is a suggestion
for the Tutorial. It would be *extremely* helpful to me to know
what lines of gobbledegook goes into my .emacs file to make the
tutorial work as advertised. I've had to cherry pick things
from here and there and at the moment it is a godawful mess. :-(

I'm progressing, but sometimes the pressure gets to me and
I have to retreat to vi. :-(

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Continuing Linux Education
Posted by MarioIncandenza on Mon, 06 Feb 2006 20:08:03 GMT
View Forum Message <> Reply to Message

Re: the devil (vi vi vi), I have to put in another plug for the viper
package (M-x viper-mode)
(http://www.xemacs.org/Documentation/packages/html/viper.html #SEC_Top),
which sets up a vi emulation inside emacs, so that you can continue to
use the vi gibberish rather than having to learn all new Emacs
gibberish. I've gotten it to play nicely with IDLWAVE, so that I can
have my C-M-a and my
:.+16s/\([1-9]\{2\}\):\([1-9]\{2\}\):\([1-9]\{4\}\)/\3\2\1/ too.

Worthwhile reading for interested parties is the page on "improvements over VI," which describes things like the implementation of multiple undo, which are powerful but a little weird. (Think of a chain of commands to be "undone," and 'u' changes direction and moves one step down the chain, while '.' continues in the same direction. I suspect this, because of the "chain" thing, of being Emacs-ish, but it might be just plain Byzantine).

Anyway, I'm really enjoying IDLWAVE, it seems like every day I find another new way to make coding easier and less tedious.

David Fanning wrote:
> JD Smith writes:
>
>> As far as the tutorial, the IDLWAVE which is bundled with Emacs is
>> ancient: 4.7 or something. Almost 4 years old (which is about how old
>> the current Emacs is, sadly). It probably even pre-dates the
>> turorial, and is missing many features. You should upgrade your
>> IDLWAVE; see idlwave.org. My recommendation is to wait for the
>> IDLWAVE 6.0 announcement which will be going out soon, and upgrade
>> then. Then the HTML help RSI supplies with your IDL 6.2 will work
>> "out of the box", and you won't need to do anything more to configure
>> your context help. By the way, Emacs 22, when it ships, should have a
>> nice modern version of IDLWAVE, so the need to upgrade will be much
>> reduced.
>
> Shoot. And I am getting so used to doing clean installs and then
> downloading everything again and again. It will be a shame to
> lose all those skills. :-)
>
> Anyway, now I have a good version of IDL, Emacs and IDLWAVE
> all working, more or less, together. But here is a suggestion
> for the Tutorial. It would be *extremely* helpful to me to know
> what lines of gobbledegook goes into my .emacs file to make the
> tutorial work as advertised. I've had to cherry pick things
> from here and there and at the moment it is a godawful mess. :-(
>
> I'm progressing, but sometimes the pressure gets to me and
> I have to retreat to vi. :-(
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.

> Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Continuing Linux Education
Posted by Mark Hadfield on Mon, 06 Feb 2006 22:52:09 GMT
View Forum Message <> Reply to Message

JD Smith wrote:
> ... By the way, Emacs 22, when it ships, should have a
> nice modern version of IDLWAVE, so the need to upgrade will be much
> reduced.

Just curious, JD: Why do you use Emacs in preference to Xemacs?

--
Mark Hadfield   "Kei puwaha te tai nei, Hoea tahi tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: Continuing Linux Education
Posted by JD Smith on Tue, 07 Feb 2006 16:13:56 GMT
View Forum Message <> Reply to Message

On Mon, 06 Feb 2006 10:37:57 -0700, David Fanning wrote:

> JD Smith writes:
>
>> As far as the tutorial, the IDLWAVE which is bundled with Emacs is
>> ancient: 4.7 or something. Almost 4 years old (which is about how old
>> the current Emacs is, sadly). It probably even pre-dates the turorial,
>> and is missing many features. You should upgrade your IDLWAVE; see
>> idlwave.org. My recommendation is to wait for the IDLWAVE 6.0
>> announcement which will be going out soon, and upgrade then. Then the
>> HTML help RSI supplies with your IDL 6.2 will work "out of the box", and
>> you won't need to do anything more to configure your context help. By
>> the way, Emacs 22, when it ships, should have a nice modern version of
>> IDLWAVE, so the need to upgrade will be much reduced.
>
> Shoot. And I am getting so used to doing clean installs and then
> downloading everything again and again. It will be a shame to lose all
> those skills. :-)
>
> Anyway, now I have a good version of IDL, Emacs and IDLWAVE all working,
> more or less, together. But here is a suggestion for the Tutorial. It
> would be *extremely* helpful to me to know what lines of gobbledegook goes

> into my .emacs file to make the tutorial work as advertised. I've had to
> cherry pick things from here and there and at the moment it is a godawful
> mess. :-(
>
> I'm progressing, but sometimes the pressure gets to me and I have to
> retreat to vi. :-(

Hmmm... I'm not aware of anything in the tutorial that requires
gobbeldy-gook in .emacs, other than the lines mentioned in INSTALL:


```
(autoload 'idlwave-mode "idlwave" "IDLWAVE Mode" t)
(autoload 'idlwave-shell "idlw-shell" "IDLWAVE Shell" t)
(setq auto-mode-alist
 (cons '("\\.pro\\" . idlwave-mode) auto-mode-alist))
```

Even these are unnecessary for pre-installed IDLWAVEs (which won't be that
useful until Emacs 22 ships). Can you let me know what you had to add to
get things working and how?

JD

On Tue, 07 Feb 2006 11:52:09 +1300, Mark Hadfield wrote:

> JD Smith wrote:
>> ... By the way, Emacs 22, when it ships, should have a nice modern
>> version of IDLWAVE, so the need to upgrade will be much reduced.
>
> Just curious, JD: Why do you use Emacs in preference to Xemacs?

For those of you wondering what the difference between Emacs and
XEmacs is, have a read:

http://www.jwz.org/doc/lemacs.html
http://www.xemacs.org/About/XEmacsVsGNUemacs.html

Mostly habit and inertia, but Emacs at (unreleased) version 22
actually surpasses XEmacs in many ways, at least for what I do. It
builds trivially for X11 on all Unixes and OSX, for Carbon under OSX,
Windows, etc. Some of my most used modes, like AUCTeX, target GNU
Emacs by default. The primary reasons for using XEmacs in the late
90's: image support, variable pitch font support, toolbars, scroll
wheel, etc. have vanished, as all of these things have been added to

Emacs with time.

XEmacs and Emacs continue to diverge, if slowly, and that makes complex modes like IDLWAVE more difficult to maintain for both platforms. IDLWAVE is developed primarily for Emacs, and then "ported" (a heavy term for a simple operation on a few little bits of code) to XEmacs. Also, since IDLWAVE is part of Emacs, and the Emacs team has a somewhat more "structured" development model than the XEmacs group, it's easier to target Emacs by default, and worry about XEmacs compatibility later.

So, feel free to use either, but my personal observation is that IDLWAVE under Emacs 22 offers the most stable and usable environment for IDL development, with Emacs 21.X and XEmacs tied for second place. Of course Emacs 22 hasn't been released yet (nor the IDLWAVE version which supports it well), so your mileage may vary (and truthfully I haven't even tried any bleeding-edge XEmacs versions).

JD

Subject: Re: Continuing Linux Education
Posted by Mark Hadfield on Tue, 07 Feb 2006 20:28:49 GMT
View Forum Message <> Reply to Message

JD Smith wrote:
 > [snip]
> Mostly habit and inertia, but Emacs at (unreleased) version 22
> actually surpasses XEmacs in many ways, at least for what I do. It
> builds trivially for X11 on all Unixes and OSX, for Carbon under OSX,
> Windows, etc. Some of my most used modes, like AUCTeX, target GNU
> Emacs by default. The primary reasons for using XEmacs in the late
> 90's: image support, variable pitch font support, toolbars, scroll
> wheel, etc. have vanished, as all of these things have been added to
> Emacs with time.

Yes, I just tried the Emacs (version 21.1) that's currently bundled with Cygwin and was pleasantly surprised. Unfortunately Emacs on our Cray T3E is stuck at version 19.28, and it's a bit sparse!

Thanks for the info.

--
Mark Hadfield   "Kei puwaha te tai nei, Hoea tahi tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Mark Hadfield <m.hadfield@niwa.co.nz> writes:

> JD Smith wrote:
>> [snip]
>> Mostly habit and inertia, but Emacs at (unreleased) version 22
>> actually surpasses XEmacs in many ways, at least for what I do. It
>> builds trivially for X11 on all Unixes and OSX, for Carbon under
>> OSX, Windows, etc. Some of my most used modes, like AUCTeX, target
>> GNU Emacs by default.

I think that is an unfair characterization. AUCTeX works as well as
can be expected on XEmacs, and that is due to a lot of hard work by
the AUCTeX developers. We even offer a finished XEmacs package from
the download site of AUCTeX <URL:http://www.gnu.org/software/auctex>.
It is a pity that XEmacs development policies thwart our work and
support of XEmacs at every turn. For example, XEmacs is distributed
with outdated AUCTeX packages due to policy reasons (XEmacs does not
accept packages that are not maintained in the XEmacs package CVS,
have the XEmacs package structure and are built by the XEmacs package
build system). Those policy reasons mean that packages intended for
Emacs are only infrequently checked into XEmacs, and often by
volunteers not intimate with the code.

More often than not, packages running on both Emacs and XEmacs are
quite better maintained on Emacs. Of course, there are some
XEmacs-only packages, too.

> Yes, I just tried the Emacs (version 21.1) that's currently bundled
> with Cygwin and was pleasantly surprised.

Guffaw. 21.1 would be rather old. 21.4 is the last _released_
version, but many people nowadays work with a snapshot of what is to
become 22.1.

> Unfortunately Emacs on our Cray T3E is stuck at version 19.28, and
> it's a bit sparse!

Uh, yes.

--
David Kastrup, Kriemhildstr. 15, 44793 Bochum

Subject: Re: Continuing Linux Education

JD Smith <jdsmith@as.arizona.edu> writes:

> On Mon, 06 Feb 2006 10:37:57 -0700, David Fanning wrote:
>
>> JD Smith writes:

> Even these are unnecessary for pre-installed IDLWAVEs (which won't be that
> useful until Emacs 22 ships). Can you let me know what you had to add to
> get things working and how?

>>> D.Fanning scribed:
>>> So I think I am golden, and start to work through the
>>> IDLWAVE tutorial, and pretty much *nothing* works as
>>> outlined there. I can't select the entire buffer with C-x h,
>>> my END doesn't change to ENDFOR when I position my cursor
>>> at the end of END and hit the space key, and--most particularly--
>>> C-c C-s tells me IDL can't be found. :-(

I suspect something else was going on since one of the complaints was that
C-h didn't mark the buffer. That's not an idlwave problem.

David, here are four really useful commands:

1. 'describe-key-briefly' which should be bound to the keys <C-h c> This
let's you input a key command like "C-x h" and instead of performing the
operation, it gives you the command bound to that keystroke in the
minibuffer.

2. 'M-x apropos' - keyword search all functions and variable names. Useful
   if you want to know how to mark the whole buffer. 'M-x apropos <ret>
   buffer' gives you a huge list of commands and variable with the word
   buffer.

3. 'describe-function' -> 'C-h f'
4. 'describe-variable' -> 'C-h v'

   Both of these get you detailed information on the function, or variable
   you're interested in.

These 4 functions will get you started on a lifetime of loving emacs. Or at
least a little bit less frustration.

Hope this helps.

Matt

--
Matthew Savoie - Scientific Programmer
National Snow and Ice Data Center
(303) 735-0785   http://nsidc.org

Subject: Re: Continuing Linux Education
Posted by JD Smith on Fri, 10 Feb 2006 17:53:28 GMT
View Forum Message <> Reply to Message

On Wed, 08 Feb 2006 02:33:35 +0100, David Kastrup wrote:

> Mark Hadfield <m.hadfield@niwa.co.nz> writes:
>
>> JD Smith wrote:
>>> [snip]
>>> Mostly habit and inertia, but Emacs at (unreleased) version 22 actually
>>> surpasses XEmacs in many ways, at least for what I do. It builds
>>> trivially for X11 on all Unixes and OSX, for Carbon under OSX, Windows,
>>> etc. Some of my most used modes, like AUCTeX, target GNU Emacs by
>>> default.
>
> I think that is an unfair characterization. AUCTeX works as well as can
> be expected on XEmacs, and that is due to a lot of hard work by the AUCTeX
> developers. We even offer a finished XEmacs package from the download
> site of AUCTeX <URL:http://www.gnu.org/software/auctex>. It is a pity that
> XEmacs development policies thwart our work and support of XEmacs at every
> turn. For example, XEmacs is distributed with outdated AUCTeX packages
> due to policy reasons (XEmacs does not accept packages that are not
> maintained in the XEmacs package CVS, have the XEmacs package structure
> and are built by the XEmacs package build system). Those policy reasons
> mean that packages intended for Emacs are only infrequently checked into
> XEmacs, and often by volunteers not intimate with the code.

Hi David:

Didn't realize you read our group! For those of you who don't know,
David is the primary author/maintainer of AUCTeX. If you use (X)Emacs
and edit LaTeX, run, don't walk to the link he lists above.

I apologize for any mis-characterization, but I definitely understand
your difficulties. I have similar troubles trying to get IDLWAVE to

play nice within both GNU Emacs and XEmacs, and as a result it tends
to work best on my platform of choice: GNU Emacs. GNU Emacs has it's
own flavor of development "lock-in", with the result that it is
incredibly difficult to keep a single complex package up to date on
both platforms, even when code incompatibilities are not the issue.
This is really a natural consequence of the ancient schism between
these two camps, and there's really not much that can be done about
it, it seems.

> More often than not, packages running on both Emacs and XEmacs are quite
> better maintained on Emacs. Of course, there are some XEmacs-only
> packages, too.

That was essentially what I was trying to say about AUCTeX, which is
also a good characterization of IDLWAVE.

>> Yes, I just tried the Emacs (version 21.1) that's currently bundled with
>> Cygwin and was pleasantly surprised.
>
> Guffaw. 21.1 would be rather old. 21.4 is the last _released_ version,
> but many people nowadays work with a snapshot of what is to become 22.1.

Yes, and perhaps sometime this year we'll have a release of Emacs 22
in hand! This by the way points out one major advantage XEmacs has
over Emacs: it decouples its core releases from add-on packages (like
IDLWAVE), so they can be updated more often than every 4-5 years. I
have some code I contributed to the CVS tools of GNU Emacs in late
2000 that has not yet gone into a shipping Emacs version.

Thanks for your efforts with AUCTeX. I use it, and the Reftex module
of Carsten Dominick (former IDLWAVE maintainer) nearly every day.

JD

Subject: Re: Continuing Linux Education
Posted by David Kastrup on Fri, 10 Feb 2006 23:21:01 GMT
View Forum Message <> Reply to Message

JD Smith <jdsmith@as.arizona.edu> writes:

> Didn't realize you read our group!

Well, it's been quite a bit of time since I actively used IDL. I am
afraid this was a vanity keyword search.

> I apologize for any mis-characterization, but I definitely
> understand your difficulties. I have similar troubles trying to get

> IDLWAVE to play nice within both GNU Emacs and XEmacs, and as a
> result it tends to work best on my platform of choice: GNU Emacs.
> GNU Emacs has it's own flavor of development "lock-in", with the
> result that it is incredibly difficult to keep a single complex
> package up to date on both platforms, even when code
> incompatibilities are not the issue. This is really a natural
> consequence of the ancient schism between these two camps, and
> there's really not much that can be done about it, it seems.

Well, I am of the opinion that it could be dealt with quite better in
the XEmacs case. When contacting the developer mailing list about any
problem, I most of the time get the impression of far more face-saving
instead of actual improvement going on, even if you are prepared to do
most of the work yourself.

>> Guffaw. 21.1 would be rather old. 21.4 is the last _released_
>> version, but many people nowadays work with a snapshot of what is
>> to become 22.1.
>
> Yes, and perhaps sometime this year we'll have a release of Emacs 22
> in hand! This by the way points out one major advantage XEmacs has
> over Emacs: it decouples its core releases from add-on packages
> (like IDLWAVE), so they can be updated more often than every 4-5
> years.

But they synch the core releases with upstream Emacs quite rarely.
They have not even synched most of the stuff in Emacs 21.1 from 5
years ago or so. Stuff like syntax highlighting.

Having more frequent updates to outdated code is not that much of an
advantage.

> I have some code I contributed to the CVS tools of GNU Emacs in
> late 2000 that has not yet gone into a shipping Emacs version.

Yes, the current release holdup is a nuisance. 23.1 will be better.

> Thanks for your efforts with AUCTeX. I use it, and the Reftex
> module of Carsten Dominick (former IDLWAVE maintainer) nearly every
> day.

Ah, I didn't know that Carsten was responsible for idlwave. Thanks
for the heads-up.

--
David Kastrup, Kriemhildstr. 15, 44793 Bochum