

Open Source Software at the BBC

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My research topic is the engineering techniques to produce audio-visual and interactive material more efficiently and more creatively throughout the BBC.



Open Source Software at the BBC

1) Networked Computer Systems

Open Source software could have a role here

2) Standards based Media Asset Management

Open Source software already has a role here



Open Source Software – Policy?

There is no specific policy.

We use it if it suits the project or business goals.



Open Source Software - Examples

We already use Open Source Software:

Running our business

Front end to web sites (e.g. BBCi news servers)

New techniques for communications

Conversions from text to speech

and more...

Linux
Apache
Perl

wiki

betsie

Helping technology development

Media Exchange with Open Standards

Collaborative Research into Picture Coding

and more...

AAF

Dirac



Open Source Software at the BBC

For some projects we just use the “free” software

Business applications

For other projects we initiate development
And place software into open source

If our goal is to communicate algorithms
and get particular standards adopted



Open Source at the BBC

Now some examples



Open Source at the BBC

Now some examples

1) Running our Business



Open Source Software - Running our Business

Decision to use Open Source is just like any other software purchase:

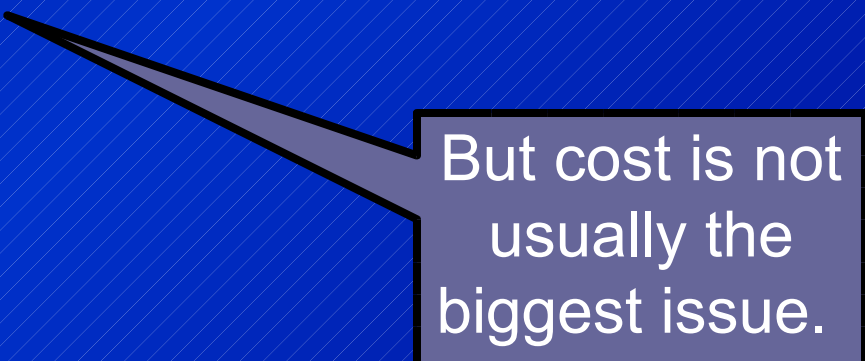
Is it reliable?

Does it serve the function?

Is it supported?

Is the upgrade path clear?

Is it cost effective?

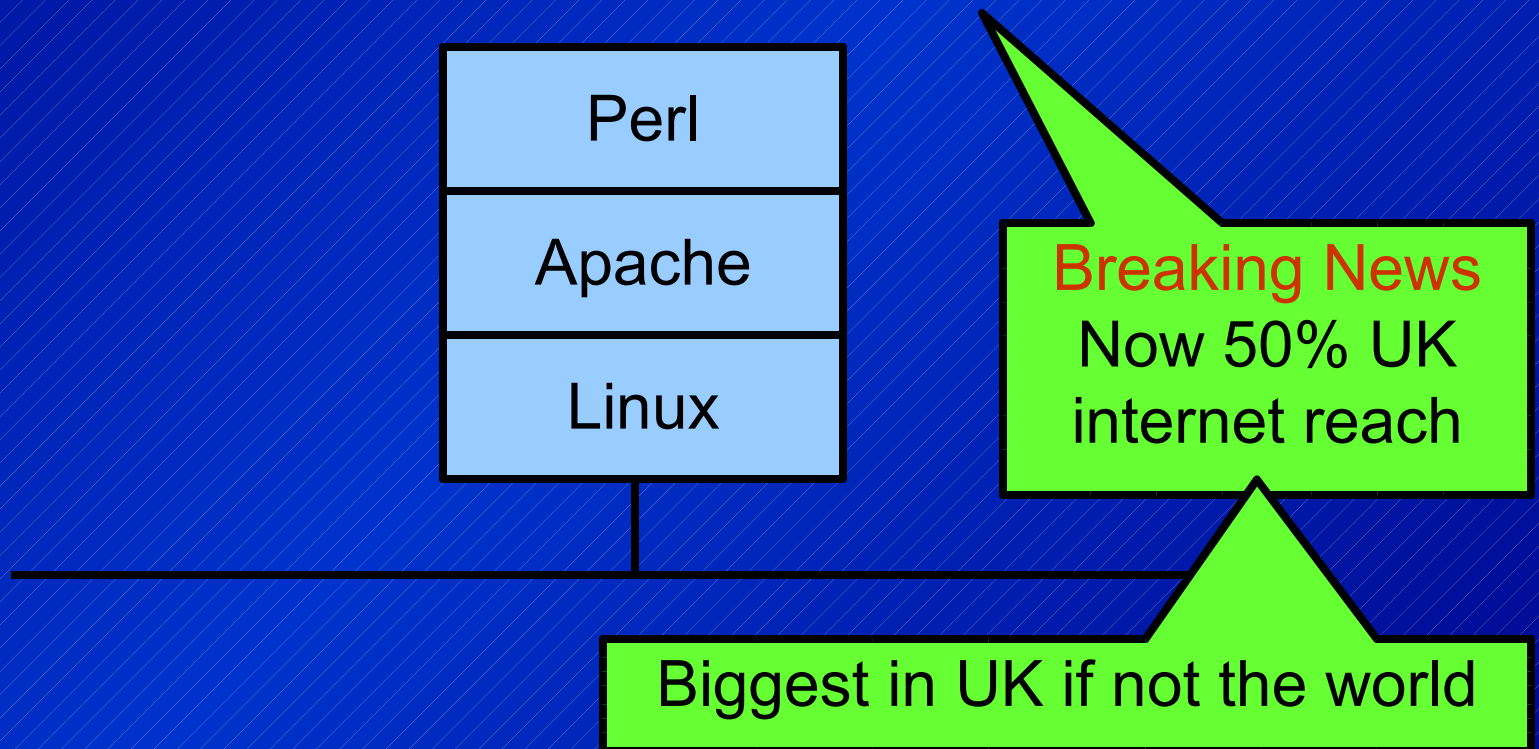


But cost is not usually the biggest issue.



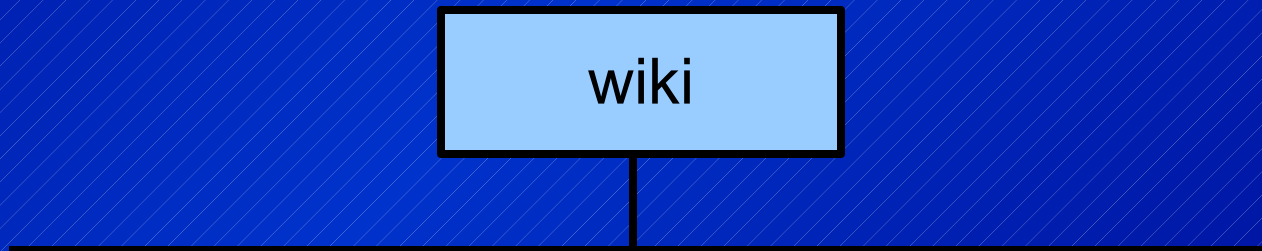
Open Source Software - Running our Business

Web Site Hosting – e.g. News



Open Source Software - Running our Business

Wiki – Collaborative Communication



Open Source Software - Running our Business

Licensing for business use

Not
significant

Not often issue, but it does save us some money

Often other advantages, for example:

- Upgrade path more open
- No per user costs
- Can make security compliance easier

As we can ensure
there is no secret
code, worm...



Open Source at the BBC

Now some more examples

2) Helping Standardisation



Open Source at the BBC

But first:

Something on Licensing



Open Source – Licensing for R&D

Licensing options available to us:

- 1) You can only use the software
- 2) You can modify the software
- 3) You can modify the software, but if you do you must publish the changes
- 4) You can modify the software, but cannot sell it
- 5) You can modify the software and incorporate into a product which you sell
- 6) Lots of variants.....

Big turn-off for

Big turn-off for
Manufacturers

Open Source at the BBC

Back to the examples

2) Helping Standardisation

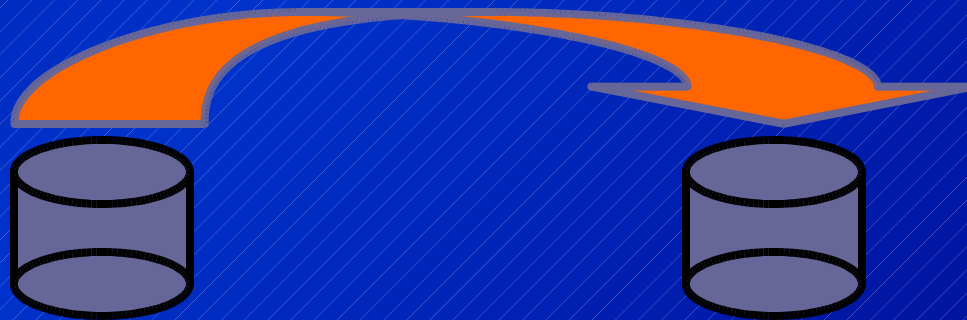


Open Source - Helping Standardisation

Exchanging media between systems

Advanced Authoring Format (AAF)

An open standard file format for exchanging media compositions between systems



Open Source - Helping Standardisation

Exchanging media between systems

Advanced Authoring Format (AAF)

An open standard file format for exchanging media compositions between systems

Not just a paper specification

Also an Open Source software toolkit

Easier to promote and use the standard



Open Source - Helping Standardisation

Advanced Authoring Format (AAF)

Principal Members

Adobe Systems, Inc., AOL/Time Warner (including CNN, Turner Entertainment and Warner Bros.), Ascent Media, Avid, British Broadcasting Corporation, Discreet, DiskStream, Inc., Microsoft, National Geospatial-Intelligence Agency, Quantel, Siemens Business Services, Snell & Wilcox

General Members

Apple, Fox, Panasonic, Pinnacle (including Fast Multimedia), SeaChange International, SGI, Thomson Grass Valley

Associate Members

BAE Systems, Blue Order, Cakewalk, Colorfront, E! Entertainment, Eastman Kodak, Korean Broadcasting System, OmniBus Systems, S4M, SADIe, Sony

And more...



Open Source - Helping Standardisation

Exchanging media between systems

Advanced Authoring Format (AAF)

So the BBC (leading) and others collaboratively maintain the Open Source Toolkit representing the standard.

<http://www.aafassociation.org/>



Open Source - Helping Standardisation

Licensing for Standardisation

You can modify the software, but if you do you must publish the changes

This is because of standards compliance

Also we consider the
patent situation

To stop other parties with
patents messing things up



Open Source at the BBC

Now some more
examples:

3) Collaborative Development



Open Source - Collaborative Development

Compressing Video

The Dirac Video Codec

A codec compresses the media to a practical storage or distribution size.

It is a fundamental component and without it we cannot do business

We would like it to be open and easy to use, develop and exploit



Open Source - Collaborative Development

Compressing Video

The Dirac Video Codec

So the BBC co-ordinates a shared development co-operating for the common good.

<http://www.bbc.co.uk/rd/projects/dirac/overview.shtml>



Open Source - Collaborative Development

Licensing for Collaborative Development

Licence encourages co-operation

Licence stops patents preventing exploitation as far as possible

BBC has taken patents to, as far as possible, protect the open source development

BBC has released some claims to patent rights, so that development remains open



Open Source at the BBC

Any questions?

