

Software comes and goes Mind the Data!

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Imagine you were a Software Developer

- The data is wrong
- The client uses stupid boring old software
- There is no metadata
- The UML schema is an outdated screenshot
- The client is ... kind of ... ignorant...

Encoding Anyone?

 **Arnulf Christl**
Just now ·  ▼

Some nerd fun from #FOSS4G2016. Oh, a hashtag in FB, interesting. Hope it does not implode...

6
20+



.. 20+
.. 20+
10
20+

4

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Imagine you were a Data Monger

- The encoding is wrong. Always! (-;
- Carriage-Return AND line feed instead of just \n
- Float values come as text strings
- Then an import routine cuts off all the decimals in one data set...
- ...because it came from a German colleague and interpreted the commas as thousands separators instead of decimal marks

Who is Right?

Obviously both are right.

But their perspectives are different



Data is a Nuisance

- For us software engineers data is a nuisance.
- It never works.
- It stubbornly refuses to "flow" into the software.
- The software is (obviously) right, so the data must be wrong.
- The good thing is that data can be "corrected", tweaked, bent and made to work...

Done!

Is the Software Broken?

- The software appears to be wrong, but no no!
- The software developer (vendor, service provider, Cloud, SaaS, etc.) tell us otherwise.
- The stack was dead expensive, looks awesomely professional and others seem to get by with it.
- So we start to wonder and then we start to tweak. Make the data fit into the software.

Done!

Wrongdoings!

But this is where it all goes wrong!

Because software comes and goes.

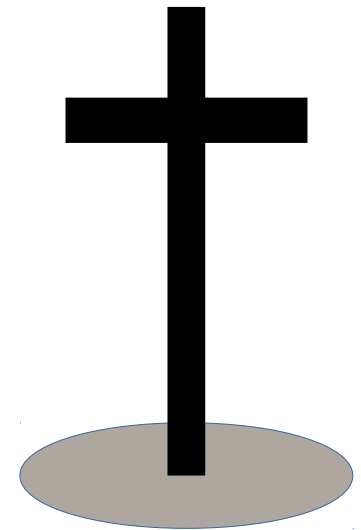
**But data stays
Especially geospatial data!**

Historic Data!

- Data may grow old but it does not go away. Instead, it becomes a historic document.
- Later on you may need to access that data when you want to show how things change over time and you have to document that change.

Historic Software?

Muahaha!



Software gets outdated and dies.

End of Story.

Software does not know History!

- Software is unaware of time and change
- Software should create a metadataset with all the changes it has "caused" to the data.
- This would be real metadata.
- So thoroughly that you can even undo and reverse the changes. All of them.

Dreams, only dreams!

But Data is Alive!

- Data grows and becomes more complex.
- This is not nice, but it is a reality.
- Deal with it!



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Image source: <http://memory-alpha.wikia.com/>

But Data does not go Crazy!



Image source: <http://memory-alpha.wikia.com/>

It is Always the Mind!



Image source: <http://alphacounter.com/>

i.e.: the Software!

The Biggest No-Go!

Never ever even dare to
think
that you have to make
your data work with some software!

Software Responsibility

The software has to deal with your data. Or die.

It is like trying to wear shoes three sizes too small. Well, you can cut off your toes...

It's been done before



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Image source: [https://de.wikipedia.org/wiki/Datei:Offterdinger_Aschenbrodel_\(1\).jpg](https://de.wikipedia.org/wiki/Datei:Offterdinger_Aschenbrodel_(1).jpg)

Money and Cost

The data is where the money sits!

This is a simple reality.

Software should therefore never be more than
thin veneer!

Analogies

If the data is bricks...

...then the software is the mortar.



No wall will have more mortar than bricks, right?

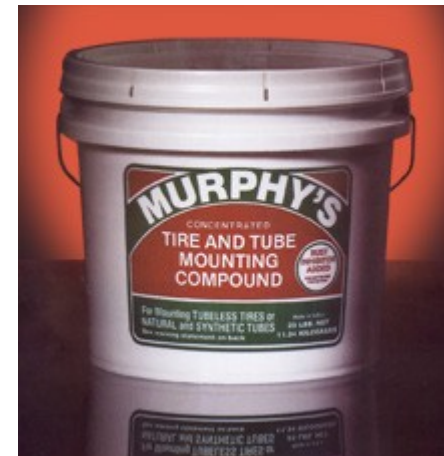
Analogies

If the tire and the rim are the data...

...then the software is the tire mounting lube.

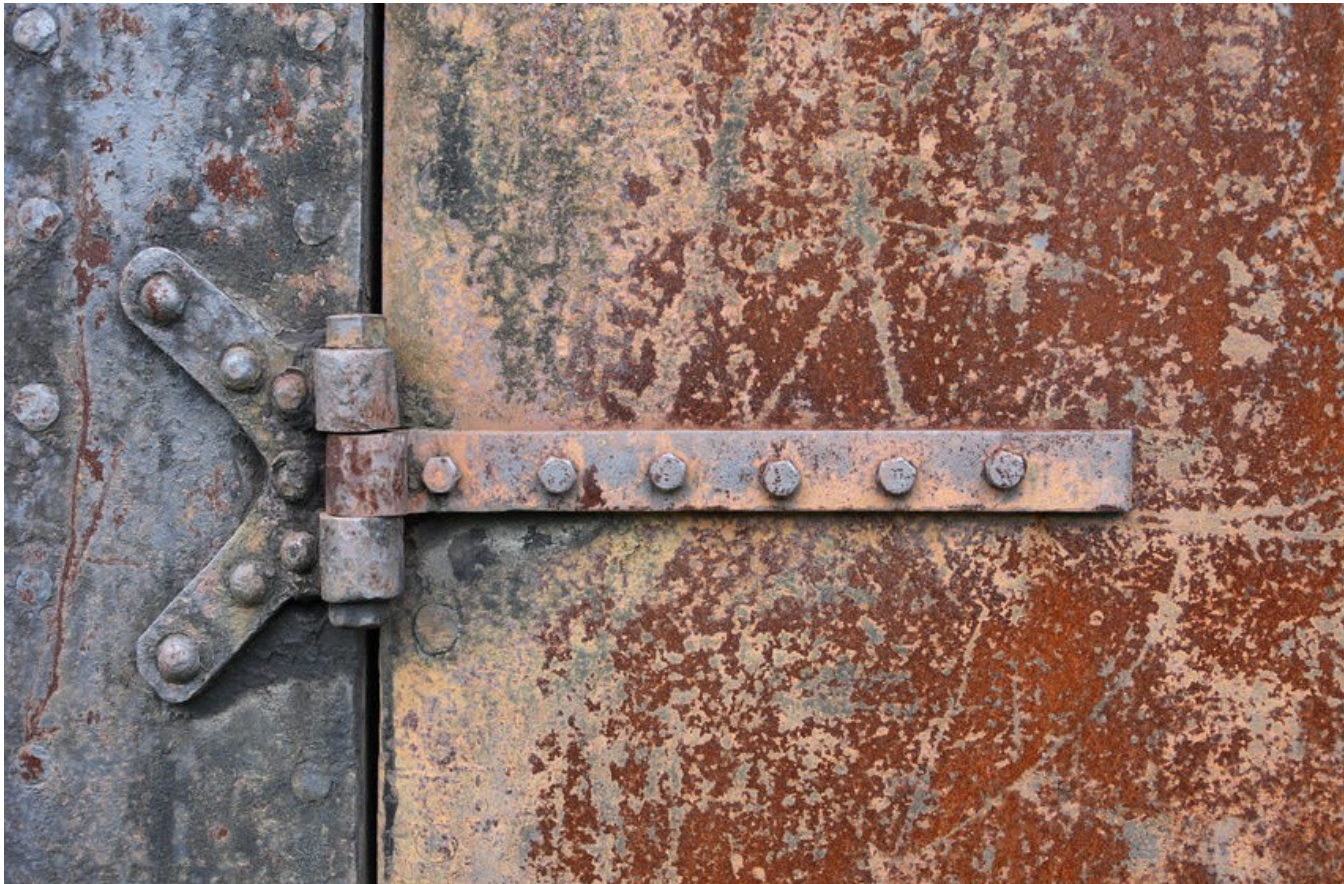


No more!



Analogies

Software is nothing but oil on the hinge.



It must be dead
easy to wipe off
and replace for
fresh oil (from
another brand).

Summary

Data is important.

Software is not important.

Software comes and goes.

Thank You

Questions?

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