



## **A Letter to SFSCON 2008 Attendees from Oliver Diedrich,**

Chef Redakteur, Heise Open

Good Morning!

First of all, would you please excuse my absence from this important meeting due to illness. I'm very sorry that I can't join you in Bolzano.

I think, Free or Open Source Software offers a great opportunity for enterprises that need an IT infrastructure -- and this means literally each and every enterprise today. We've made a lot of case studies of enterprises that use Open Source Software, and have found very different, but compelling, reasons for enterprises to use Open Source Software.

\* One prominent reason is **cost**. For many enterprises, hardware and software are important cost factors. Open Source Software does not require license fees, and it allows the hardware to be scaled to the actual needs of an enterprise - rather than to the resource demands of (possibly over-scaled) software.

For example, in 2003 Deutsche Bahn (the German Railway) decided to use Linux as a strategic server platform. The switch from the proprietary Solaris SPARC platform to Linux on x86 hardware and the usage of Open Source Software in as many areas as possible saved about half the costs of hardware and software licenses which account for 40 percent of the total expenses of the Deutsche Bahn IT.

Their experience was quite good: Deutsche Bahn has a highly critical IT infrastructure. If their datacenters would go down, all railway traffic in Germany would collapse within a few hours. Here are citations from a summary statement by Ingo Schwarzer, head of the Deutsche Bahn IT:

- Linux and Open Source is ready for the data center.
- Quick savings can be reached above all in the infrastructure area.

\* A second reason is **control of the software**. Airbus, for example, has to develop system software for their airplanes. Their problem: The system software must be supported and adapted to new operating regulations for up to 30 years or more -- so long as an airplane is operated. No software vendor guarantees that his development tools will be available for such a long period of time.

Together with some other enterprises, Airbus started the TOPCASED project (*Toolkit in Open source for Critical Applications & Systems Development*). Their goal: a complete collection of Open Source software development tools. Why Open Source? Because there are many other unrelated enterprises and institutions with an interest in such a development environment which can use the software, but which can also contribute to software development and maintenance. The result is better tools and a faster development process than one enterprise alone could afford or achieve.

\* Other important reasons are **flexibility** and **vendor independence**. With Open Source Software, users are not bound to a unique software vendor's product cycles and product policies. For example, they don't have to upgrade software just because their software vendor decides to terminate current support offerings or to stop delivering security patches. With Open Source, an enterprise is free to choose its own service and support partners, and can even choose to maintain its own software, or collectively with partner enterprises.

Union Investment, a large financial institution - to take another example - runs a very complex Enterprise Application Integration (*EAI*) infrastructure that links different systems and platforms across their divisions and related institutions. They started with a proprietary solution that had to be abandoned because the vendor terminated their software support. In order to gain both flexibility and vendor independence, Union Investment chose to design and implement a new EAI architecture, based completely on open standards. Their goal was to put in place a flexible infrastructure, using components that could be plugged in and out in a way that corresponded to actual needs of an enterprise, rather than to the product policy of a specific vendor.

After some market research, Union Investment recognized that Open Source Software delivers the best open standards compliance in the market. Moreover, with open source they could build an optimized software environment, driven by their users' needs rather than by vendor offerings, and, in doing so, remaining in complete control of their software configuration, maintenance and support. Any problem, once detected, could be addressed directly, instead of waiting for an uncertain response from a vendor to a submitted report.

Open Source can also be a question of **security**. With the opportunity to check an application's source code, users can identify and correct security problems.

The Nordrheinische Ärzteversorgung, a pension insurance fund for about 43.000 German physicians, was looking for a smartcard - based security system for their IT infrastructure. They found that none of the commercial solutions available met

their very high security requirements. Their solution: They took some well established Open Source security software and combined several partial solutions to produce a solution that satisfied their actual needs.

This example also highlights another advantage of Open Source Software: you can select from the many building blocks now freely available, to create a solution that exactly meets your needs. This can be done by the IT staff of an enterprise, whenever the necessary knowledge is internally available; but it can also be done by contracting with an IT service company; a sound and economical alternative to paying license fees for a ready made solution that rarely provides a perfect fit to your requirements: you will have provided the stable software environment that fits your needs.

In summary: for enterprises which "just use" IT, Open Source offers an opportunity to find an individual solution at reasonably lower cost, and for IT service companies, Open Source offers a new and unbounded revenue path. Viewed from the perspective of government, I'm convinced that Open Source Software is advantageous for the economy. Money saved on IT expenses can be invested locally or used by enterprises to gain competitive advantage. There are many positive examples of Open Source use. What is needed is educating enterprises in the advantages and mechanisms of Open Source usage, and then helping them target and realize their individual goals.

Best regards, Oliver Diedrich