

# Interview with Per-Ola Sjöswärd, Executive IT-strategist, Swedish National Police

September 2007



## Per-Ola Sjöswärd

*Per-Ola Sjöswärd is the Executive IT-strategist at the Swedish National Police. On his initiative the Swedish Police has adopted a multi-tiered architecture built on Java Enterprise Edition and Open Source components. Mr Sjöswärd enthusiastically aims to enhance understanding and adoption of Open Source Software combined with commodity software in mission critical systems.*

**Q:** *The Swedish chief of Police last year decided that all future IT systems within the Swedish police organization should be based on an Open Source Software (OSS) infrastructure. Currently you're implementing this policy at the development level and also migrating several existing systems to OSS. You have personally been heavily involved in the project. What are the main drivers?*

**A:** We primarily aim to cut costs and stay independent of vendors while maintaining the high stability and security inherent in police work. Our legacy consists of three architecture types ranging from ancient mainframes to the current multi-layered architectures. In order to save tax payers' money and minimize risks we needed to become more committed to one clear, scalable strategy and phase out dated systems. After extensive evaluation and testing we decided on an OSS stack dominated by Linux, MySQL and JBoss running on commodity hardware.

**Q:** *You plan to actually implement the plan during 2007. This seems like an ambitious pace considering that you have almost 25,000 employees, the majority engaged in field work.*

**A:** There is always a risk that profound decisions like these get stalled in big organizations, so we found it important to also decide on the implementation plan. So far we're on schedule.

**Q:** *One of your main goals is to save money by standardizing on OSS. How will the savings be achieved?*

**A:** When calculating it's important to see the whole package: software, hardware, training and maintenance costs. Our conservative estimates project 50% savings within the next five years compared to the proprietary solutions that we also investigated. This represents the cost of 400 fully equipped police cars, to put it into perspective, and in reality we expect about 70% savings. Licenses and support costs are lower with OSS but reduced hardware costs are as important. We will run our systems on commodity x86 machines, adding more as needed. Internal staff will be able to take a larger responsibility for maintenance and development.

Continued >>>



**Q: In what respect will the adoption of OSS make you more independent?**

**A:** First, remember that we're talking standardization of the infrastructure here. The Swedish police develops about 70% of the systems in-house. By keeping all business logics out of the infrastructure and sticking to a strictly multi-tiered architecture we retain the flexibility to exchange or modify components, engaging third parties as necessary. Open Source in itself of course means transparency of the code, adding to safety and flexibility. In our experience proprietary vendors tend to offer product-specific solutions that make your life easier in the short run but also leads to lock-in. We will stay within ANSI SQL standards for our databases to avoid all such shortcuts and fixes.

**Q: Security is an important aspect of police work. Did you have any concerns in this respect when considering OSS?**

**A:** Not really, since open source software today is mainstream and quite transparent to scrutiny. We might use beta-versions for testing and development but only deploy stable versions in live systems. Established software like Linux and MySQL is already extensively used by lots of big and trusted companies and organizations like the UN FAO and Google. We also like the concept of proactive advisory services that come with MySQL Enterprise today, as opposed to the traditional routines to call support when something breaks – the new approach actually reflects the proactive nature of police work quite well. That type of support will surely have a bright future once customers fully realize it's there.

**Q: Did you encounter any internal resistance to the OSS project due to the profound changes it implies?**

**A:** Certainly, but in my experience most developers are keen on trying new solutions. Today most of the people coming out of universities are familiar with OSS and need little training. Some administrators might be conservative and hesitate about OSS but I tell them that we've already been using it for years without problems. Our real security concerns should be the code developed in-house since that code hasn't been scrutinized to the same extent and also might be dependent on key individuals. Concerning general FUD (Fear, Uncertainty & Doubt) about OSS and recent discussions about patent infringements, I merely interpret those as signs that the established vendors perceive OSS as a real threat to their business models.

**Q: You obviously have embraced a business critical use of Open Source Software. What are your long term speculations concerning OSS versus proprietary software?**

**A:** We simply choose what we think gives the best performance to cost ratio for our police organization in the long run. Personally, I don't think people will care much about the difference between OSS and proprietary software in the future. Just like any person picks a mobile telephone today, organizations and companies will build infrastructure from whatever components that solve their needs most efficiently. OSS will no doubt be important parts of these solutions. Concerning hardware, I believe in commodity hardware and doubt that anybody will pay hardware support in the future since you can easily replace malfunctioning units.

**Thanks you Mr Sjöswärd for taking the time to give us an insight into your new OSS project!**