

Platform for a faster company

IT trends in the community: service-oriented architecture

Service-oriented architecture (SOA) is a super-flexible way of building IT systems and is used by large insurance companies and small shops. But how does it work?

The foremost sales argument for SOA is its capacity for change. In old IT systems the different parts are strongly dependent on one another. If one function has to be changed the whole system has to be changed: expensive and time-consuming. The result is that many necessary process improvements will not get done.

- With SOA the services are encapsulated so that they become independent. You can change, remove or add a service without influencing the rest of the system, says Daniel Akenine, Architect Evangelist at Microsoft.

In a service-based architecture a service is a group of program functions that carry out business processes.

The services communicate with one another, with their clients and with the world outside through a contract. The connections are loose, which means that a program does not need to know all the details about other programs to be able to establish contact.

Plus and minus

ADVANTAGES

Flexibility, capacity for change. In a service-oriented architecture it is possible to integrate many applications in the business.

DISADVANTAGES

The more services existing in a network, the more difficult the security issues will be.

The administration of rights for different users increases concurrently with more services becoming available.

According to Lajos Farkas, Consultant at LafaData Application Architecture, it takes about twenty per cent longer for companies to become operational with SOA compared with an old function-based system.

- But you recover that several times over. Once SOA is established it goes around fifty per cent faster to build new solutions for new work tasks. The IT system also becomes more secure.

Services in service-oriented architectures work together independent of the platform. It makes no difference if the underlying system is based on Microsoft, Java or SAP. All the big suppliers have undertaken to be compatible with SOA.

The Retail Business System Company develops systems that from the outset are built for changes.

- For our customers in the retail trade SOA is an excellent way to integrate cash and retail systems, says Stefan Melander, Business Architect at RBS.

Supervision of stocks is another common application.

- With SOA we can build standardised databases which work for widely different customer types, sports shops as well as supermarkets.

The interface is message-based.

- If you wish to rent a car via the internet, you enter your message on the rental firm's web page. The enquiry is connected through a contract to the service which sends a reply, says Lajos Farkas.

The advantages are several: security is increased and the complexity of the system decreases.

As long as the contract is unchanged, big changes in the underlying system can be made without the customer needing to update anything.

- Ordinary citizens do not really notice SOA very much, just that they get access to better and more stable services at an ever-increasing pace.