Cloud and clear

Eurocloud Europe General Director Maurice van der Woude outlines the challenges that Europe must overcome in order to realise the true potential of cloud computing…

Despite the fact that the term 'cloud computing' has become better known to end-users and organisations, people are still hesitant to embrace it and harness its full potential. Most people are unaware of the benefits of cloud computing and the new opportunities it may bring them, not only as a consumer, but also as a business user.

Benefits
To start with the most beneficial element of cloud computing; it is available anywhere. Anyone with a wireless or fixed internet connection is able to log-on to the solution of their choice with any device and make use of the cloud. There is no need to worry about storing data locally on the device because the data will also be stored in the cloud.

Next to this availability element, instead of buying licenses, now customers only have to subscribe to a cloud solution and pay for the service per user on a monthly basis. This is an ideal situation for smaller companies that are particularly present across Europe, the so-called SMEs, which can now switch any application on or off for any user within their company, thus saving money on yearly licenses, leaving their co-workers with only the applications they actually use. This scalability element, and the subscription structure, are the major cost-effective elements in cloud computing.

The other aspect is that cloud computing allows for huge savings on local storage capacity on servers. Where there is a need to have multiple gigabytes or even terabytes of disk space and servers within the local environment, all elements are accessible through the cloud. Even when calculating capacity for complex calculations is required, there is a possibility to add processor capacity, which makes the use of any device highly efficient without having to manage IT locally. There is also the huge benefit of not having to manage a local or in-house data centre, which can instead be hosted by a professional data centre for any private networks, or left out if servers from any provider are being used for a public cloud solution.

Standardisation
When new technologies emerge that affect the way we work, it is human nature to compare and benchmark solutions with one another. When business opportunities arise, entrepreneurs will look at the opportunity and build

their solution as fast as possible to present it to the market. Of course, they will make sure that the application is stable and secure, but they also want the customer to stick to their products and make use of any of the other products they offer. When that happens, an undesirable situation of 'vendor lock-in' may occur. There are many ways to describe vendor lock-in situations, but the most common outcome is probably that the user has no means of going from one supplier to another, because the data is not transportable in any way. Apart from the issue on data portability, contracts and service level agreements may also differ per service or supplier, or per country. In order to overcome these cloud-uptake-inhibitors, standardisation is needed – not only on an industry level, but also on a governmental level. The European Commission is already working to create EU-wide legislation on the use of cloud contracts, and this must make it easier to perform cross-border business. The industry on the other hand is already working on standardisation, and given all the initiatives under way across Europe, it seems to be full steam ahead on the issue of standardisation.

Funding programmes

FP7 programmes are available in order to foster research and innovation in Europe. However, the European Commission did not reserve that much funding for calls concerning innovation and research on cloud computing. What the Commission did do was call upon the EU member state governments to participate in a cloud partnership, which is intended to make progress not only on legislation but also on IT-procurement, innovation and e-government within the public sector. On a local level, the extent to which funding programmes for innovation and research are available depends largely on the country itself.

Challenges

When talking about opportunities with cloud computing, it should be acknowledged that the cloud market is still very young and not every organisation or consumer really knows what cloud computing is actually about. Because of the huge business potential, a lot of organisations called their solutions 'cloud' all of a sudden, and stuck the words 'as-a-service' before every service they were offering.

The first step to get rid of the barriers is to understand what cloud computing really is. NIST, The American National Institute of Standards and Technology, published a detailed report defining the concept that was last updated in 2011.[1] Globally, the NIST definition is adopted as the de facto standard for the term.

Before cloud computing can be implemented successfully, there is a need for a reliable, high-speed infrastructure across Europe. Industry and local governments are waiting for each other to facilitate this. The next issues to attend to will be unified European legislation on data privacy, regulation on one single digital market, industry standardisation, certification and security.

Cloud computing is a global matter, and so the challenges around it must be solved on a global scale. Organisations and governments from different continents must work together to provide solutions to the market to gain trust

---

Silver linings: Neelie Kroes and the potential of cloud computing

In September, the European Commission released its new strategy, 'Unleashing the potential of cloud computing in Europe', which outlines actions that should deliver a net gain of 2.5 million new European jobs, and an annual boost of several billion euros, equivalent to around 1% EU GDP, by 2020.[1]

"Cloud computing is a game-changer for our economy," European Commissioner for Digital Agenda Neelie Kroes said. "Without EU action, we will stay stuck in national fortresses and miss out on billions in economic gains. We must achieve critical mass and a single set of rules across Europe. We must tackle the perceived risks of cloud computing head-on."

In addition to advising on technical standardisation (to improve interoperability, data portability and reversibility), key actions of the strategy include the suggestion of an EU-wide certification scheme for trustworthy cloud providers, development of model contract terms for cloud computing agreements and a cloud partnership of member states and industry to harness the public sector's buying power.

Kroes hopes that undertaking these essential changes will enable a faster and increased use of cloud computing across the economy. At the Broadband World Forum in Amsterdam in October, she commented: "Cloud computing is a whole new model for providing IT with software or storage held remotely – and accessed over the network. Imagine – all your favourite services, music and movies stored in a cloud locker, and you can access them from wherever. And companies, across most of the economy, getting fast, cheap, flexible IT services too. It's a huge opportunity."

Kroes estimates that by 2020, cloud computing could be worth as much as €250bn to the EU economy.[2]

[1] http://europa.eu/rapid/press-release_IP-12-1025_en.htm?locale=en

[2] http://europa.eu/rapid/press-release_SPEECH-12-731_en.htm?locale=en

---

for cloud solutions, promote their uptake and stimulate innovation. Eurocloud is working together with European authorities, the European Commission and the European Parliament – as well as with industry – to promote a stimulating environment for the development and growth of the Cloud Computing industry.

[1] Report available through www.nist.gov/itl/csd/cloud-102511.cfm

Maurice van der Woude
General Director
Eurocloud Europe
mvdwoude@eurocloud.org
www.eurocloud.org