

CLOUD COMPUTING

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Digital cloud providers face EU privacy audits



The European Commission believes it is only “logical” that companies providing cloud services over the Internet face audits on whether they are keeping their promises on personal data security.

The Commission would like to increase cloud providers’ accountability to their users in an upcoming EU “Cloud Strategy”, due out next year.

Audits and liability clauses are just two ways the EU is considering to harmonise the 27 national legal regimes hampering cloud adoption, say Commission sources.

Cloud services such as Apple’s iCloud, Microsoft’s Windows Live or Dropbox allow users to store digital music, photos or other documents in data centres, while business can outsource their entire operations using platforms and infrastructure in the proverbial cloud.

In Europe, companies

offering cloud services have to comply with safe harbour agreements which contain seven principles including security, user access to data and accuracy. Currently some 2,500 US companies comply with these rules.

But the greater part of businesses in Europe still cite security concerns as one of the biggest obstacles to cloud adoption. And EU officials now acknowledge that safe harbour is not enough to assuage these concerns.

“Under the safe harbour agreement, US organisations self-certify their adherence to seven principles. They then enjoy safe harbour status and appear on a list. There is a question whether this is robust enough or goes far enough to cover an EU citizen’s personal data moving around in a cloud,” a Commission source said.

“Audits are not only for data

loss but also for quality and absence of service,” the source told EurActiv, foreshadowing the kinds of measures the Commission is considering to make providers more liable to their users.

But questions remains. “Does it [safe harbour] mean, for example that administrative personnel who have access to your data must have been screened? Or is that beyond the bounds of reasonable?” one EU official said.

“When you put your data somewhere actually you are putting your financial assets in a data centre. What happens to your assets if the cloud provider goes bankrupt,” added Ryan Heath, a spokesperson for the European Commission.

Companies deny liability for lost data

A report by three academics

studying the cloud business at the Queen Mary University of London paints a rather bleak picture of cloud providers’ terms of service.

The report concludes that US companies in particular tend to write very broad disclaimers relinquishing them from as much liability as possible for data loss and other problems.

One glaring example came from the American provider GoGrid, which issues the following disclaimer to its clients: “GoGrid does not warrant that the Service will be uninterrupted, error-free, or free from viruses or other harmful components. The Service is provided with no warranties regarding security, reliability, protection from attacks, data integrity, or data availability.”

“The service is provided on an ‘as is’ and ‘as available’ basis,” the disclaimer quoted in the

Queen Mary report says.

Adding to costs

Though the industry agrees that auditing is necessary to build trust and increase the uptake of cloud services, some warn new audits could add extra expense to a technology which relies on its relative cheapness to attract clients.

Further audit requirements would create costs that would potentially be passed on the user, an industry source said, insisting they were not against audits per se.

Auditing the cloud could be more cumbersome as the selling point of the service relies on having multiple back-ups spread around different data centres in different parts of the world, the source said.

“Cloud is dependent on creating economies of scale without human intervention.”

Cloud adoption hampered by cow data protection?



The divergent application of data protection laws in the EU, one of which includes the protection of livestock, is one of the many obstacles the European Commission faces as it tries to boost cross-border cloud adoption.

"The major problem for cloud is the different implementation of the Data Protection Directive in different member states," a Commission source said.

The European Commission is currently rewriting rules on data protection and data retention to try and get countries' varying laws closer together, the source said. The current directive will be morphed into a regulation which will be directly enforceable on member states.

An industry consultation earlier this year mirrored the official's concerns.

"Online service providers now routinely handle the data of citizens from multiple member states, and often process personal data in multiple markets in and outside the EU," Microsoft recently outlined in a Commission consultation on cloud computing.

"In doing so, they often find themselves subject to different, confusing, and sometimes conflicting national rules," the company stressed.

Under the most extreme examples, personal data is not even allowed to leave the territory, negating any benefits

of cloud services which rely on a ubiquitous service.

Greece's implementation of the Data Protection Directive has muddled providers that are not sure whether they can or cannot transfer data outside Greek territory.

An assessment from the European Commission last year dubbed the Greek law "a restriction affecting the free flow of personal data between the EU member states."

In addition, the country's implementation of the Data Retention Directive includes a requirement that data and servers are located inside national borders.

Cow medical records

Luxembourg's law recently presented a Dutch entrepreneur with an unusual obstacle. Remi Caron was working on a project that would require the transfer of cow medical records outside the country, something which he learned was not possible under the country's broad reading of the Data Protection Directive.

The European Commission insists, however, that its laws are written for "natural persons."

Under Finnish and Swedish law on public entities, there are security restrictions preventing the provision and use of cloud services, according to law firm Bird & Bird.

The firm which routinely handles cloud cases also

laments the many different definitions of data controller and data processor in different EU countries' interpretations of the directive.

France, Germany stop the cloud at borders

In France, a draft law threatens to hamper cloud services. In June, French authorities suggested that cloud computing operations located outside the EU would be barred from processing sensitive data.

In Germany, a country with a delicate history of data surveillance, some data protection authorities argue that the storage of personal data outside Germany is unlawful.

The data protection authority of Schleswig-Holstein, Germany's northernmost province, recently said that many transfers of personal data in connection with cloud computing would not satisfy requirements under national data privacy laws.

The European Commission says it plans to eliminate any doubt companies may have on data transfers to other member states and to third countries.

The review will also reform the powers of data protection regulators, some of which, like the Czech authority, are prevented from handing out fines.

EU-US data privacy storm blows cloud off course

The EU is currently in talks with the US over its reluctance to allow sensitive data transfers across the Atlantic under the US Patriot Act, one of many obstacles to the wider adoption of cloud computing.

Public tenders for cloud services in some European countries are currently avoiding US providers like the plague for fear of falling under the US Patriots Act, which compels companies to transfer the personal data of terror suspects to Washington authorities.

European companies are also afraid that even the slightest presence in the US means they also fall under US jurisdiction. Some companies, like Deutsche Telekom, have publicly said they want an official certificate sheltering European companies from American laws on data transfers.

European clouds wanted

Though the data transfers contravene EU law barring organisations from passing on user data to a third country without the users' permission, the Patriot Act contains a clause on "delayed warrants", basically granting access to data without prior consent.

A recent statement by EU Commissioner Viviane Reding, responsible for justice and fundamental rights, says that US authorities have reassured her by promising they will first "seek assistance from member states using existing police and judicial cooperation channels."

But European cloud providers say they would rather not have to deal with the US Patriot Act at all. "A German cloud" would be a "safe cloud," Reinhard Clemens from Deutsche Telekom's T-Systems

division said recently.

The Dutch minister for Security and Justice, Ivo Opstelten, also recently warned that US cloud providers would be "excluded" from public tenders if the EU does not come up with a solution.

International agreement on data transfer?

The issue is fast becoming a bone of contention in the European Parliament, which has consistently defended strong EU data protection laws. MEPs are gearing up for debates on the act's legality under EU law.

"The US considers just having a single mailbox in the US enough to request data from European companies," said Sophie in 't Veld, a Dutch MEP known for investigating EU-US data transfers.

"This is a remarkable interpretation," she told EurActiv. The MEP also referred to a Belgian case where a judge ruled that the country's law enforcement authorities could not get data on the e-mail account of a Belgian national from the US company Yahoo.

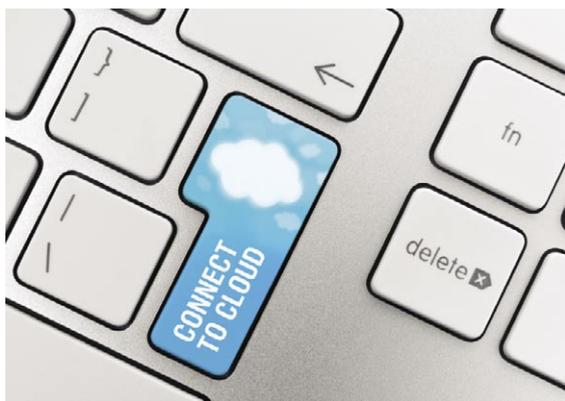
"We are doing it right, so why can't they?"

Viviane Reding, the EU's Justice Commissioner, has been meeting with her counterpart Erik Holder in the US to discuss the Patriot Act and a potential international agreement on data transfers.

"We would like a set of internationally agreed principles which cover data protection, privacy and security and levels of certification, so that a user or a citizen can put data into a cloud and can be sure data never exported without permission," said Commission spokesperson Ryan Heath.



Cloud: good or bad for IT jobs?



Cloud computing is changing how IT professionals work. But is it putting them out of work? Not likely, say cloud providers.

Cloud providers claim that their services - be they software, infrastructure or platforms - will halve corporate IT spending. That raises the question whether it will also lead to redundancies.

The argument is that cloud

computing automates tasks that, in the past, have been performed by employees, and that after automation occurs, those people would no longer be needed.

Low- to high-end jobs

IT professionals will move from low-end jobs to just doing the higher-end jobs, said

Richard Davies, chief executive of the UK start-up Elastic Hosts.

Infrastructure services and in-house data centre operations will likely shift to providers like Amazon, Google and Microsoft while IT teams will be required to configure these services, integrate them with business operations, carry out updates and load data to the cloud.

But that doesn't mean professionals should forget about infrastructure: even if companies rely on cloud providers for their back-end systems. "You still have to know a lot about this infrastructure, you just don't have to manage it yourself," said James Staten, an analyst at Forrester Research.

Davies acknowledges that data centre technicians - staff who instal on-site servers - will likely become redundant in companies that embrace cloud computing, but that technicians' jobs in bigger

companies using cloud could become more sophisticated.

Business analysts in charge of company operations, as well as software integration engineers in charge of making sure the cloud and the business stay connected and updated, might be looking at even heavier workloads depending on the size of the company and its cloud-based operations, said Davies.

Job-seeking IT engineers beg to differ: "Cloud computing is great, but over time, there will be some big players that will provide almost all external cloud services, leaving the internal IT staff without a job. You might just need a small group of IT staff to provide infrastructure services for your organisation," said Sebastian Bammer, an IT engineer in Vienna.

Good for graduates

But IT jobs are still listed

as one of the most desirable fields for graduates during a recession.

According to Forbes, software design engineering will be one of the fastest growing occupations through 2016.

The IT profession ranks ninth in the top-10 list of recession-proof jobs compiled by the UK recruitment company Hays.

Cloud fans argue that the phenomenon will make computing and the jobs connected to it explode.

"The reason many are wrong about cloud computing's effect on employment is that they assume this disruption is unleashed in a static environment," said Ben Golden, chief executive of the HyperStratus consulting firm in California.

"However, the field of computing has never been static, and will not be in the face of cloud computing," Golden said.

Banks' cloud take-up slowed by legal uncertainty



While financial services and banking firms are increasingly looking to cloud computing services to enhance their businesses, actual take-up is being hampered by legal uncertainties and conflict between the EU and the US over data privacy.

Banking and other financial services firms had been expected by industry observers to be among the most likely to use cloud computing. Advocates of cloud say it can allow these companies to reduce overhead costs, make IT costs more flexible and enable new business models.

Gartner, a major IT research and advisory firm, recently conducted a survey which found that 44% of financial services firms' Chief Information Officers in Europe expected more than half of their transactions would be supported by cloud infrastructure by 2015.

However, Peter Redshaw, Gartner's managing vice president, was sceptical that this

would be achieved given existing trends. "The current levels of usage are very low, less than 5%. ... [To reach 50% by 2015] is a very rapid rise and there is no indication that this sort of transformation is happening yet," he said.

Radshaw argued that while several issues posed obstacles to the pick-up of cloud computing, the most important was legal uncertainty, saying: "That is the one that [financial services firms] give 90% of their attention to: the regulatory obstacle."

MEPs reaffirm data privacy

Meanwhile in Brussels, EU lawmakers appear keener than ever to protect people's privacy online, including on cloud services.

The European People's Party (EPP), the largest group in the European Parliament, issued a Strategy Paper on internet regulation on Thursday (1

December), which reaffirms the principle that EU privacy standards must apply to all data collected within the EU, even if it is stored on servers elsewhere.

While noting "the promising economic and commercial prospects of the cloud" the paper says: "Either EU jurisdiction must be extended to all data collected within the EU or via international agreements which allow the EU to control that its standards are kept in third countries."

The paper is intended to inform the Commission's new proposals on data protection expected for early 2012.

An EPP source close to the issue said the use of cloud would be excluded in the absence of such protection. "We need to ensure that the confidentiality of the data that banks and insurance companies use is guaranteed and therefore they cannot use cloud computing [outside of Europe]. They have an interest in a clear regulatory framework to develop their new business models," he said.

This could put the EU on a collision course with the US as American legislation, notably related to counter-terrorism, mandates government access to data stored on US soil. Joe McNamee of European Digital Rights (EDRI), an online privacy watchdog, said: "The Patriot Act

and FAISA demand access to data without giving information to the data subject. So you can end up in unfortunate conflicts of law and ethics if you move data to the US."

The Parliament has been assertive on issues of privacy in the past. In February 2010, it voted to reject the so-called SWIFT agreement to share financial data between the EU and the US, only ratifying a renegotiated deal the following July.

From savings to security

While security issues represent a major obstacle to the adoption of cloud computing, some firms are also looking to them as a business opportunity.

ITpreneurs is a Dutch company specialised in IT training, including relative to cloud computing and the banking sector. While they mostly work with other IT firms, last year they trained over 2,500 staff for banks ING and ABN AMRO in the use of cloud computing, with the aim of reducing manpower needs and server costs.

Laurens Gunneweg, product manager with ITpreneurs, claimed there was a shift in priorities with regard to cloud, saying: "[in 2010] it was more about the economies of scale and the changing ways

of working in the organisations. I think now things are changing ... security is the major issue in cloud computing."

"That's why we want to work with security specialists to create a global certificate for data protection," he said, referring to a possible certification scheme being work on by the Cloud Credential Council.

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