

ITU-T: Blue Sky Thinking on Cloud

Jamil Chawki, Vice-Chairman, ITU-T Focus Group, talks to InterComms about Cloud Computing



Dr Jamil Chawki leads, since June 2008, Standardization Fixed & Mobile Core Network & Cloud Computing domain for France Telecom RD (covering major SDOs ITU-T, ETSI, 3GPP, IETF...). Before this position, Jamil was a deputy director for Enterprise Cloud computing research program working on SaaS Marketplace architecture & strategy for France Telecom. In 2004 he was in charge of the first FTTH triple play pilot project for Jordan Telecom. From 2000 to 2002, he was appointed as Chairman & CEO of Ogero Telecom operator in Lebanon. He was in charge of OSS/BSS restructuring for Ogero Telecom and he supervised the implementation of first Gigabit Ethernet Data Network in the Middle East. Before 2000 he has worked 10 years as a Research manager in the Optical and IP Transport network at France Telecom RD.

Jamil is currently a Vice Chair for ITU-T Cloud Computing Focus Group.

Q: Can you give me an overview of your goals and work to achieve those goals thus far?

A: Cloud is an important emerging subject and the ITU-T decided to create a focus group in order to identify items to be standardized within the organization. Within the Focus Group, we established two Working Groups. The objectives of the first Working Group are to study the Cloud Computing in the technical areas of use cases, requirements, architecture and the roles of telecom players in Cloud. The goal of the second Working group is to have an overview of the active standards developed by other standardization organizations in the Cloud area and to identify the gap analysis. After combining the outputs of both Working Groups, then at the end we will be in a position to identify the Work Items to be standardized within the ITU-T.

Q: You mentioned Gap Analysis, have you disfigured those standard in the will you want to bring in?

A: We have identified 15 active organisations in Cloud Computing and we have established official liaisons with main SDOs like ISO, DMTF, CSA, NIST. Most of these SDOs are IT



- oriented and our goal in ITU-T we want to explore telecom vision of cloud with more services and user oriented.

As first results, the Focus Group has already identified several work items, domains or candidates to be developed within the ITU-T. These are the Cloud Ecosystem, Security, Cloud Architecture, Cloud Networking, Inter-Cloud relationships, Eco-friendly Cloud, Accessibility, Cloud terminal and Cloud management.

Q: You have had a series of meeting in recent months. Why so many and so close together?

A: Each Focus Group is attached to a Study Group in the ITU-T. In our case that is the Telecommunication Standardization Advisory Group (TSAG). Their last meeting was in February and at this occasion the Focus Group Cloud had the opportunity to present a mid term report on our progress.

The Focus Group will not produce standards but will instead produce a number of technical documents and also make recommendations to the ITU-T, mainly with regard to the candidate items requiring further standardization activity within the ITU-T. We will complete in a first step the work on four of the eight work items related to Cloud definitions including Cloud Ecosystem, Cloud Architecture and Cloud benefits from a telecom perspective.

When the Focus Group was established, its lifetime was set to one year from June 2010 to June 2011. Following the presentation our mid term report to our TSAG parent group, TSAG agreed to extend that lifetime to the end of this year. This extension will allow us to produce the output documents related to the eight candidate study items we identified. . One of our main objectives is to understand what Cloud really means from a telecom perspective and also to have a consolidated view of the Cloud related standardization activities.

Q: How is security being addressed within your Focus Group?

A: Definitely. Moving to the Cloud means the complete outsourcing of services and data. Consequently, ensuring security and availability are very important for the enterprise governance. At the moment we have identified security threats

and requirements both from a user and service provider perspective. We think that telecom providers have an important role to play in this domain since they are considered as a trusted partner by enterprises and end users. We are hoping to finalize the Cloud security study subject soon which will then be mainly addressed by Study Group 17 which is active on infrastructure and application security.

Q: How will you go about mapping, managing and anticipating future requirements for Cloud computing? What you do you do to predict the future?

A: Service Oriented Architectures, Web Services, IP networks and virtualization are the main technologies in use at the moment in Cloud Computing. These technologies can be considered as relatively stable but they are not 100 percent standardized. There are about 15 active standard organizations working on Cloud Computing. In fact, there are already some important standards now being used for Cloud Computing but in some cases these standards need to be adapted and evolved to fulfil Cloud requirements. We think that first Cloud standards will be ready by the next year.

Q: How are you working with other organizations to achieve that?

A: When we started the overview of Cloud Computing, we identified several organizations that are already active and important actors in Cloud Computing. This overview of activities is important for us in order to identify organizations that are already working in one domain. If such organizations have already advanced standards, then the ITU-T needs to collaborate with them so as not to re-invent or duplicate those standards. Cloud Computing is more of a technology and enabler but we need to push more standards related to Cloud services. The feeling is that ITU-T are more Telecom oriented and less IT oriented and we need to push the telecom perspective of Cloud Computing as an ICT.

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