VISION Cloud – Making an impact Leaving a legacy

Presenter: Andreas Menychtas (ameny@mail.ntua.gr)

Project Coordinator: Eliot Salant (salant@il.ibm.com)
Scope: Storage in the Cloud

Challenge: How could it be better, easier and more secure?

Objective: Architect and implement an infrastructure for the reliable and effective delivery of data-intensive storage services, facilitating the convergence of ICT, media and telecommunications.
VISION Cloud has been visionary from the outset

At the proposal stage we identified the need for **new fundamental and generic capabilities** for cloud storage supported in the storage system.

- **Rich metadata** and **storlets** as fundamental enablers
- **Content centric approach** to simplify the way objects are accessed
- **Data mobility** and **federation** to avoid data lock-in
- **Enterprise capabilities** to enable use for mainstream business activities such as compliance, secure access, flexible SLAs, etc.
VISION Cloud is a solution platform!

Rich metadata
- Supported as integral part of the storage system
- Enables accessing objects according to their content and relationships
- Provides management directives to the storage system

Storlets: safe and secure computation in the storage system
- Exploit computation resources in the storage system
- Avoid the network overhead
- Keep the data safer
- Extend storage system function

Rich metadata and storlets transform object storage from a storage platform to an extendible solution and application platform
A solution platform eliminating data lock-in

Strengthening open standards

- VISION Cloud has been one of first implementers of CDMI and has found several deficiencies and worked to get them fixed in the standard
- Leading vendors (e.g., Amazon, Google, etc.) have remained with proprietary APIs

Attacking the problem of data lock-in through on-boarding federation

- Data can be on-boarded to a VISION Cloud using existing third-party interfaces
- On-boarding occurs on-demand and in the background
A solution platform for telco

1. Call
2. Claim_Id (number + date + +)
3. Data & Metadata Storage
4. Send images
5. Storlets triggering
   - Accounting
   - Transcode
   - Text2speech
   - Convert to pdf
   - Image metadata extraction
6. Request billing
A solution platform for autonomous industrial systems

1. Industrial automation system
2. Archiving sensor data and logs
3. VISION Cloud
4. Querying sensor data by content properties
5. Siemens Service

Could be several GB a day
Indexing, event detection, clustering
Forklift application based on SieLWa UI Framework

Wow! All the data at my fingertip
Support / Dev. / Maintenance

First Use Case: Autonomous Fork Lifts
A solution platform for media
A solution platform for media that won the IBC 2013 Special Award
VISION Cloud at IBC 2013

IBC is Europe’s largest media tradeshow
   Over 50,000 visitors from around the world

… and VISION Cloud was this year’s winner of the IBC Innovation Award
Leveraging IBC…

VISION Cloud presented a paper at IBC and demonstrated in a booth.

Flyers from partners advertised VISION Cloud spinoff technologies and products.

IBC released a press release announcing the award which was translated into several languages.
IBC Awards look back 100 years and forward to the cloud

IBC Recognises Pioneering Practical Cloud Development

London, Aug. 20, 2013 /PRNewswire via COMTEX/ - The Vision Cloud project, part of the European Commission's FP7 research and innovation programme, set out to bring together users, vendors and academics to develop the principles by which services and storage in the cloud can best be used for media. Because of its wide collaboration and practical outcomes, B&c is to present the project with the ITS Special Award.

Premiato per il progetto "VISION Cloud" il Centro Ricerche Rai di Torino

Il Centro Ricerche Rai ha ricevuto il XX premio internazionale per la Cloud, all'IBC 2013 di Amsterdam. La conferenza tecnico-commercial e la distribuzione dei contenuti è un tema mondiale insieme ai NATM: visitatori rappresentanti il 15% dell'intero mondo.

Il riconoscimento è stato ottenuto grazie alla partecipazione attiva della Commissione Europea, denominata VISION Cloud. In queste aziende leader a livello mondiale (tra cui IBM), si sono avvantaggiati per la memorizzazione informatica dei contenuti, grandi archivi digitali e la produzione di business basata su tecnologie innovative.
A strong web site gave high visibility

Over 25,000 unique visitors...
Continuing the VISION Cloud legacy

The project placed a strong emphasis on partner exploitation from the very start of the project…

In the final review, industrial partners presented their exploitation plans, with three closed door sessions presented by executives from IBM, TID, SAP
Thank you!

http://www.visioncloud.eu

Andreas Menychtas
ameny@mail.ntua.gr
National Technical University of Athens