

# Cloud-based Preservation: Point / Counter-Point

Peter O'Halloran  
Head of Client Services &  
Operations

I am Peter O'Halloran, many thanks to Art Pasquinelli, John Howard & Ursula Byrne for the invite & allow me to share my thoughts with you as a "special" kind of service provider in the education sector in Ireland

PASIG has been excellent opportunity for me as an Archive & Presentation newbie to learn about the field and the issues practitioners face in such a practical way... that no formal course could provide....

So presentation in three parts – give you a quick flavour of what HEAnet is and what we do, some reflections on the Cloud, and brief update on the Discovery exercise....

- HEAnet is Ireland's National Education and Research Network
- Set up in 1983 as a collaborative body by the seven Universities and DIT, The HEA and DETI
- Became a non-profit, Limited company in 1997

Borne out of collaboration, and sustained by it.....

Funded by the Higher Education Authority and our Clients.



We are a member of a large collaborative community...

These are a sample of the community – internet2 in the US, ja.net in the UK, surfnet in Netherlands and so on....

Could this be a case study/model for the Preservation & Archiving Community to consider for the future in some way ?

- Provide high quality Internet Services to Irish Universities, Institutes of Technology and the research and educational community, including all primary and post-primary schools
- Enable research and learning through leading edge shared services to our clients
- Act as a representative body for the ICT education & research community, at home and abroad
- Facilitate innovation and collaboration worldwide

So what we do...

Internet Services

Enable Research & Learning thru Shared Services

Representative Body....

Look to innovate & collaborate....





### GÉANT At the Heart of Global Research Networking

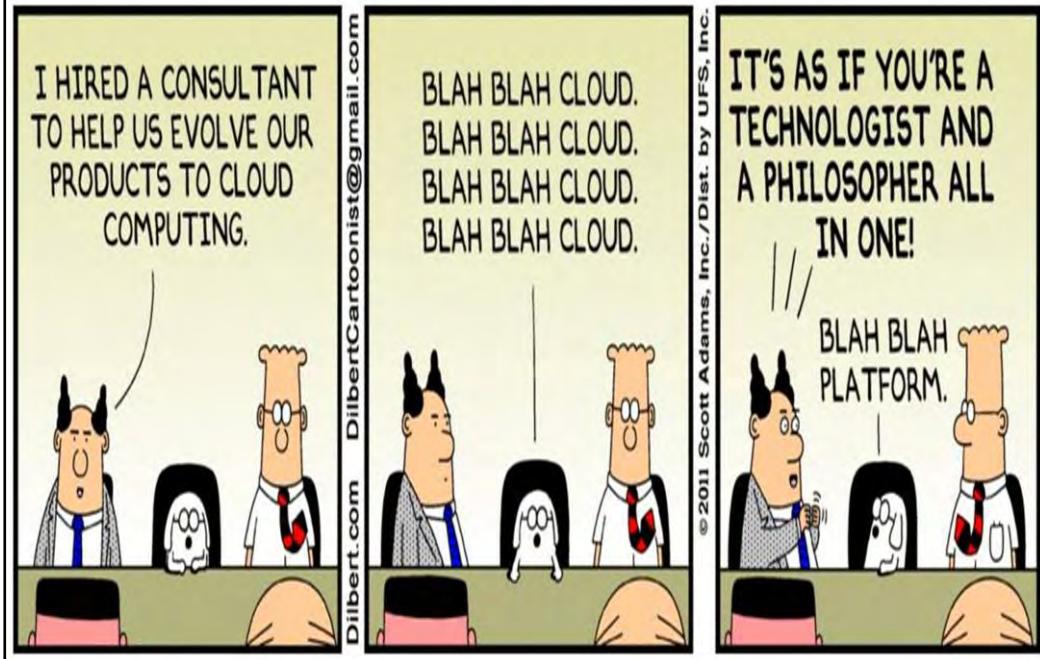


The academic network gives us a global reach.... The benefit of collaboration for a country like ours.....

- 2011 Survey – key challenges...
  - Budgetary Constraint
  - Human Resources
  - The impact of Mobile Technology
  - Adoption of cloud computing
  - Keeping up with demand for new services...
- The “Service” perspective

As part of Client engagement we surveyed in 2012 all our Clients – ICT Directors and Managers..... Practitioners!!

Within this constrained time the other theme was the provision for services.... Where the provision of learning environment, student mail etc is being moved off campus to third parties... Blackboard is hosted in Amsterdam for example, Google mail used for student email....



In an environment that is fiscally constrained - Cloud as the panacea for dramatic savings scares me....

Perception of budget holders that do not have experience in this field, could make poor decisions re where ICT funding may go from a capital and recurrent perspective!

Guess what clouds do ?



Is there a simple model out there which tells you how to avoid the trough ?

As a connectivity provider we provide one of the key ingredients to the cloud - concepts not new, so we welcome it.... But like anything new it presents risks that must be managed....

Defn NIST.

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models.

### Essential Characteristics:

1. *On-demand self-service.*
2. *Broad network access.*
3. *Resource pooling.*
4. *Rapid elasticity.*
5. *Measured service.*

HEAnet are already on the road to enable this as Services Provider & consumer/broker cloud services for our clients...

But we must be cautious..... as we embark on the journey there are risks!

- Great potential but immature
  - Technical Solution
  - Commercial T&C's
- As with any proposition
  - Meet demand & needs
  - Entry & Exit Criteria
  - Integration & Interoperability
  - Sustainability
- Offers both opportunity & risk

Whatever about the technology, you must read the commercial T&C's – they might not be cloud oriented reflecting a metered base on use etc etc

Just because it is cloud doesn't mean it gets an amnesty when evaluating the Total Cost of Ownership so ask the awkward questions;

Does it fit the need & business needs – sometimes it fits, but a public cloud service can be changed without much notice and you may get a nasty surprise when you start to work....

Make sure the entry/exit criteria are clear and the path is tested – you may get your data back alright but not in any readable format!!!

Consider how the cloud service will work with other data & systems that may not be cloud – how does that work and who does it ?

Will this service be around for a time – they may be a big operator, and it may be low cost now – but cloud business models are not necessarily well established – Google's business models may change....

So cloud offers opportunity but there are many risks which must be managed and mitigated – factor this into your costing/value models!!!

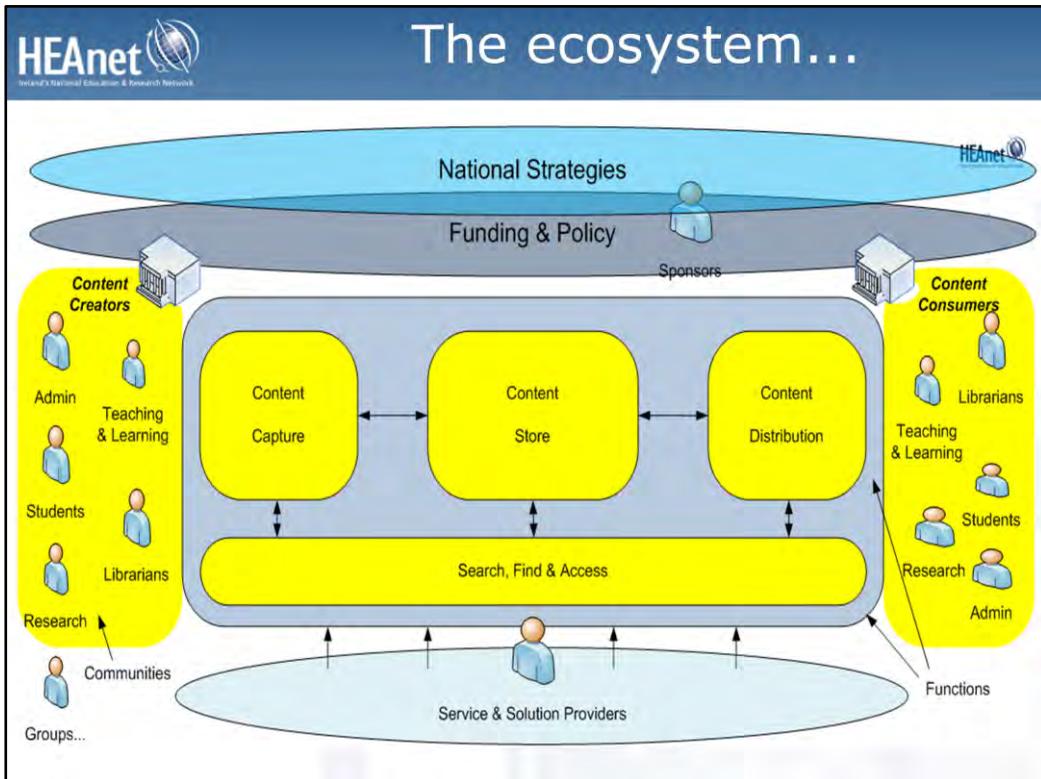
- Already deliver range of offerings
  - Federated Access (Edugate)
  - Co-location & Hosting
  - EduStorage & Media Hosting
  
- Service Plan 2012
  - Content Management Discovery
  
- Discovery driven by Data Deluge....
  - Client Requirements
  - NREN Community

So to the last section – how I ended up on stage.....

Provide services indirectly to the community – already

But the request to do the Content Management emerged from our yearly service planning process, and a request from our clients

Trigger for this work is the “Data Deluge” and the topic is receiving attention from many quarters including the NREN community under the auspices of Terena’s Aspire initiative.



Way to see the woods from the trees!

Higher Education Centric – distribution of content in its broadest sense

Represent the current scope of Discovery....Preservation & Archiving (Librarians) one very important community – with its own needs, but so too Teaching & Learning, Administration and the Student....

Variety of communities – have distinct needs.... Generate important knowledge & integrate.....

Areas to examine, appreciate this forum to help me deepen my understanding –

As the basis of the strategic exercise understand the stakeholders needed to shape/contribute to our Strategy...

Find the pain points, aggregate use cases and determine what role we may play in the future....

- Continually focus on value we could bring...
- Which role ?
  - Service Provider, Broker, Facilitator, Partner
- Complete the discovery & initiate a Strategic Exercise
- Continue to deliver and enhance our service portfolio....

So to conclude.....

