Conferência “Internet, Negócio e Redes Sociais”

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Patrocínio Principal

Apoios

Patrocinadores Globais APDSI
CLOUD COMPUTING AS THE BASIS OF NEW DIGITAL BUSINESS

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UTAD
May 2012
• I come from ..... 
• What does it mean Cloud Computing? 
• Where do we want to go? 
• Steps 
• What do we want to do and how? 
• Remember 
• Bibliography
What do you think about cloud computing?

- Which is the meaning of cloud computing?

- Are you using clouds nowadays?
COMPUTING MODELS

ON PREMISE
   Clients owns hardware and software
   Dedicated infrastructure designed for peak volume
   Fixed cost
   CAPEX intensive (Capital expenditure)
   Client owns risks

MANAGED SERVICES
   Client and provider owns hardware and software
   Dedicated infrastructure designed for peak volume
   Predictable monthly recurring fee
   Move CAPEX to OPEX
   Client and provider share risks

CLOUD SERVICE MODEL
   Provider owns hardware and software
   Shared infrastructure (multi-tenant) provisioned based on usage
   Utility based pricing
   OPEX intensive (Operative expenditure)
   Provider owns risks

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Value of Cloud Computing

Agility
Instant access to the computing power and scale that you need

Utility
You pay for what you consume

Ubiquity
Its accessible anywhere....for anyone....at anytime
CLOUD TYPES

PUBLIC CLOUD
Service provided owned and managed
Access over the web
Pay-per-use
Multi-tenant

HYBRID CLOUDS
Interoperable combination of private and public clouds

PRIVATE CLOUDS
Service provider or self owned
Internally or remoted hosted
Simple tenant
Which one should I use?

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>HYBRID</th>
<th>PRIVATE</th>
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<tbody>
<tr>
<td>SMB</td>
<td></td>
<td>Large enterprise</td>
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<tr>
<td>Low security concerns</td>
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<td>High security concerns</td>
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<td>€€</td>
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The question is:
Which client fits your business?

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In 2010, USA uses approximately 50% of cloud all over the world. This means (+-) 50M €.

Forecast says, USA will have 50% of total in 2014, but this is 120M €.

Almost 2.5 times growth in 4 years.

SMB are 20-25% of these data.
What about Spain: (January 2009, not closely updated yet) (Bankinter Foundation)

• We have 3.350.000 companies in Spain (11.000 in Galicia)
• 5.375 had more than 200 employees (10 in Galicia)

• 99.84% are SME

• We have a very high rate of access to the Internet (96,2%) and
• mobile telephony (90,9%)

• Internet with website 60%

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• From TNS WorldPanel (April 2008- March 2009)

• 2 M spanish homesites used to buy goods from Internet (meals and drugstore)
• 13,4% of all homes
• 2 times a year, 65,00€ average; Galicia 58,00€ and 1,4 times a year

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Reasons to embrace the cloud (pros and cons to discuss)

P, C : Security outages

P, C : Costs

P, C : The Cloud is the future (present) of the computing

P, C : Accelerate your time to market

Conclusion: First you need to build your Cloud strategy

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Characteristics to be analyzed for (cloud connected system)

1) Security
2) Reliability (Fiability)
3) Fastness
4) Scalability
5) Economy
6) Independence
Characteristics to be analyzed for a System connected to the Cloud (Cloud Connected System) I

1) Security
   Information is saved and it is moved in conditions that can permit think that it will not be changed without authorization (violated).

2) Reliability (Fiability)
   The system is available when it is needed.

3) Fastness
   The systems responds within the acceptable time conditions (up and down loading).
Characteristics to be analyzed for a System connected to the Cloud (cloud connected system) II

4) Scalability
The use of the system should grow or downgrow in base to the necessities of the user.

5) Economy
The use of the system should be less than to maintain an owned system.

6) Independence
The system in the Cloud should permit the access to the users on any browser based system.
USER TYPES

1) Applications users

2) Storage users

3) Sharing users (applications, storage)

4) Developers

5) Regulators

6) Administrators

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USER TYPES I

1) Applications users
   Users that use applications and software that exists in the Cloud (in the net, in Internet) (google apps, msnaps... etc.)

2) Storage users
   Users that use the cloud as a storage center (data bank) of their information, with the idea to share or not with other users. (dropbox, box, sharenet....)

3) Sharing users (applications, storage)
   Users to whom the net provides the majority of the services explained before (icloud, google, yahoo, msn... )
USER TYPES II

4) Developers
   People dedicated to design software that works ONLY in the Cloud (generalizing only in the net, in Internet)

5) Regulators
   “Aliens” that regulate (pretend to) the use of the Cloud (Serious like IEEE, ACM, W3C... not so serious as governments (politicians))

6) Administrators
   People that manages the CPDs dedicated to the Cloud.

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- Speaker private documents, or from my lectures in Planning of Information Systems in the Cloud (2005-2012)  
  Prof. Dr. Manuel Pérez Cota

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  Dr. Jim Doti; Dr. Renee Bergeron; Dr. Menas Kafatos; Dr. Narinder Singh

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   Fundación de la innovación Bankinter (2010)

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   Gartner (2011)

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-www.oracle.com/Cloud-Computing (several dates)

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-nube.es (several dates)

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• Doubts
• Questions
• Comments
• Suggestions
• ….some jokes
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